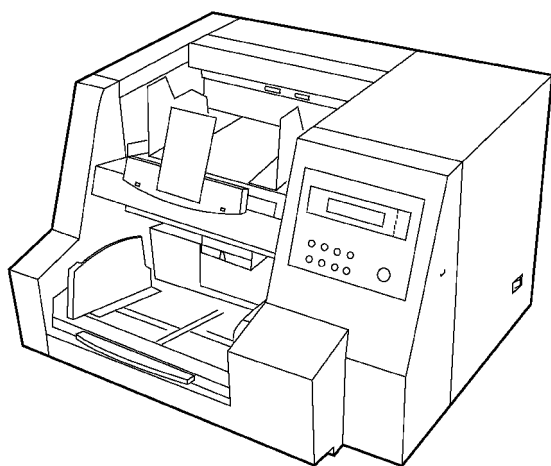


Service Manual

High Speed Scanner

KV-S3105CSERIES

KV-S3085SERIES



⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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CONTENTS

	Page		Page
1 GENERAL PRECAUTIONS	4	10.3. Requirement after parts replacement	118
1.1. Safety Precautions	4	11 BLOCK DIAGRAM	119
1.2. Electrical Tests	4	11.1. Function	119
1.3. For Service Technicians	4	11.2. Boards	120
1.4. About Lead Free Solder (PbF: Pb free)	5	11.3. Explanation of Connector	121
2 SPECIFICATIONS	6	12 SCHEMATIC DIAGRAM	139
3 COMPONENT IDENTIFICATION	8	12.1. CONTROL Board	140
4 INSTALLATION	9	12.2. INTERFACE Board	156
4.1. Minimum Space Requirements	9	12.3. MOTHER Board	169
4.2. Unpacking	9	12.4. DRIVE Board	174
4.3. Installing the Exit tray stopper and Exit stopper	10	12.5. LCD Board	175
4.4. DIMM Module Extension	11	12.6. PANEL and SENSOR Boards	176
4.5. Installing DIMM Module	17	13 CIRCUIT BOARDS	181
4.6. Connecting the Unit to a Personal Computer	18	13.1. CONTROL Board	182
4.7. System Requirements	19	13.2. INTERFACE Board	183
4.8. Setting the Language & SCSI ID	20	13.3. MOTHER Board	184
4.9. Others	21	13.4. DRIVE Board	185
5 SECTIONAL VIEWS	22	13.5. LCD Board	186
5.1. Motor and Mechanism	22	13.6. PANEL Board	187
5.2. Circuit Boards	23	13.7. SIZE Board	188
5.3. Sensors (Boards)	24	13.8. HOPPER [CONNECTOR] Board	188
6 MECHANICAL FUNCTION	25	13.9. HOPPER [POSITION] Board	188
6.1. Paper Feed Mechanism	25	13.10. HOPPER [ANGLE] Board	189
6.2. Feed Roller Mechanism	26	13.11. POINTER Board	189
6.3. Retard Roller Mechanism	27	13.12. RELAY [LOWER] Board	189
6.4. Conveyor Roller Mechanism	28	13.13. POST IMPRINTER DOOR Board	189
6.5. Hopper Mechanism	29	13.14. EXIT [FRONT] Board	190
6.6. Optical Unit Mechanism	31	13.15. SKEW [L] Board	190
6.7. Reference Plate	32	13.16. SKEW [R] Board	190
7 MAINTENANCE	33	13.17. JAM Board	190
7.1. Maintenance Chart	33	13.18. RETARD [POSITION] Board	191
7.2. Cleaning Rollers	34	13.19. FAN RELAY 1 Board	191
7.3. Cleaning the scanning section glass and reference plate	37	13.20. FAN RELAY 2 Board	191
7.4. Cleaning Sensors	38	13.21. RELAY [UPPER] Board	192
7.5. Replacing Limited Life Parts	39	14 PARTS LOCATION AND MECHANICAL PARTS LIST	193
8 DISASSEMBLY INSTRUCTIONS	45	14.1. Exterior	194
8.1. Disassembly Flowchart	45	14.2. Chassis and Base 1	196
8.2. Exterior	46	14.3. Chassis and Base 2	199
8.3. Unit Components	52	14.4. Hopper Unit	202
8.4. Circuit Board Assemblies	64	14.5. Paper Feed and Optical Units	204
9 OPERATION	76	14.6. Power Unit and Circuit Boards	207
9.1. Front Panel Specifications	76	14.7. Packing	209
9.2. Operation-1 (Normal Mode)	78	14.8. Tool	210
9.3. Operation-2 (Service Mode)	78	15 REPLACEMENT PARTS LIST	211
9.4. Setting List	79	15.1. CONTROL Board	212
9.5. Setting Operation (Normal Mode)	85	15.2. INTERFACE Board	219
9.6. Setting Operation (Service Mode)	92	15.3. MOTHER Board	225
9.7. Service Utility	105	15.4. DRIVE Board	227
10 TROUBLE SHOOTING	107	15.5. LCD Board	228
10.1. Warning	107	15.6. PANEL Board	228
10.2. Error Code	107	15.7. SIZE Board	228

15.8. HOPPER [CONNECTOR] Board	228	15.15. SKEW [L] Board	229
15.9. HOPPER [POSITION] Board	229	15.16. SKEW [R] Board	230
15.10. HOPPER [ANGLE] Board	229	15.17. JAM Board	230
15.11. POINTER Board	229	15.18. RETARD [POSITION] Board	230
15.12. RELAY [LOWER] Board	229	15.19. FAN RELAY 1 Board	230
15.13. POST IMPRINTER DOOR Board	229	15.20. FAN RELAY 2 Board	230
15.14. EXIT [FRONT] Board	229	15.21. RELAY [UPPER] Board	230

1 GENERAL PRECAUTIONS

1.1. Safety Precautions

1. Before servicing, unplug the power cord to prevent electrical shock hazard.
2. When replacing parts, user only manufacture's recommended components for safety.
3. Check the condition of power cord. Replace if wear or damage is evident.
4. After servicing, be sure to restore the lead dress, insulation barriers, insulation papers, shields, etc.
5. Before returning the serviced equipment to the customer, perform the following electrical tests to prevent shock hazard.

1.2. Electrical Tests

1. Unplug the power cord and check for continuity between the earth ground connection on the plug and the metal cabinet. There should be zero ohm resistance found.
2. With the unit unplugged, short the AC Live-Neutral of the plug with a jumper wire.
3. Turn ON the power switch.
4. Measure the resistance value with an ohmmeter between the jumpered AC plug and each exposed metal cabinet part, such as screwheads, etc.

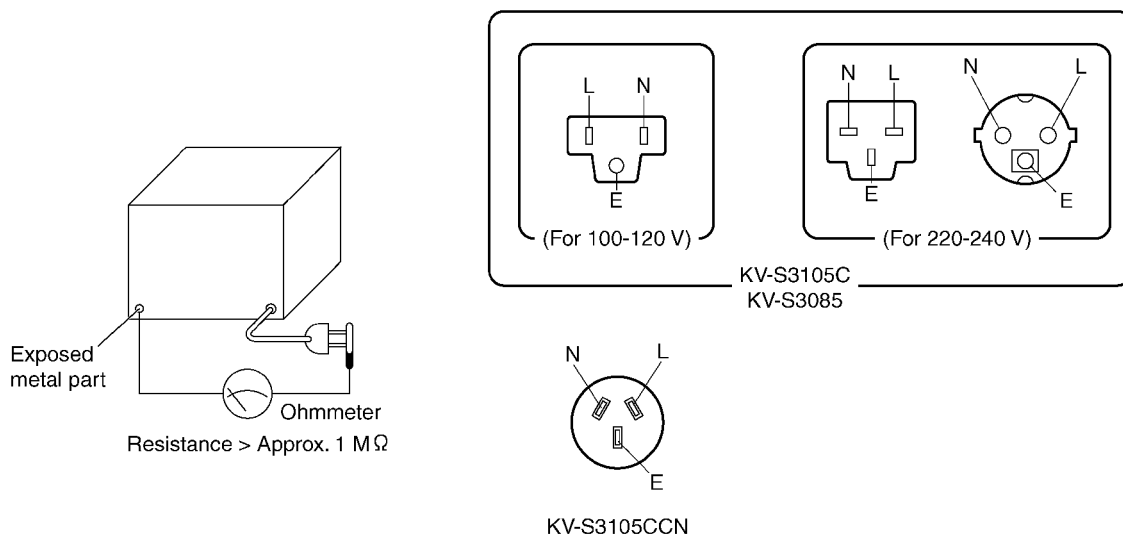
Note

Some exposed parts may be isolated from the chassis by design. They read infinity.

5. If the measurement is less than 1 M Ω , a possibility for electric shock may exit.

Note

This hazardous condition must be corrected before the unit is returned to the end user.



1.3. For Service Technicians

ICs and LSIs are vulnerable to static electricity.

When repairing, the following precautions will help to prevent recurring malfunctions.

1. Cover the plastic parts with aluminum foil.
2. Ground the soldering irons.
3. Use a conductive mat on the worktable.
4. Do not grasp IC or LSI pins with bare fingers.

1.4. About Lead Free Solder (PbF: Pb free)

Note

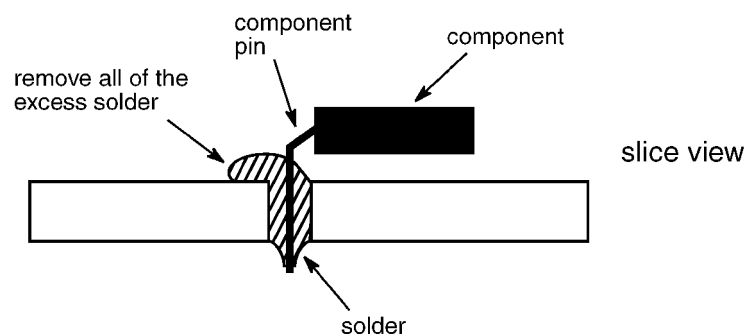
- In the information below, Pb, the symbol for lead in the periodic table of elements, will refer to standard solder or solder that contains lead.
- We will use PbF when discussing the lead free solder used in our manufacturing process which is made from Tin (Sn), Silver (Ag), and Copper (Cu).
- This model, and others like it, manufactured using lead free solder will have PbF stamped on the PCB. For service and repair work we suggest using the same type of solder although, with some precautions, standard Pb solder can also be used.

Distinction of PbF PCB

- PCBs (manufactured) using lead free solder will have a PbF stamp on the PCB.

Caution

- PbF solder has a melting point that is 50 ° - 70 °F, (30 ° - 40 °C) higher than Pb solder.
Please use a soldering iron with temperature control and adjust it to 700 ° ± 20 °F (370 ° ± 10 °C). In case of using high temperature soldering iron, please be careful not to heat too long.
- PbF solder will tend to splash if it is heated much higher than its melting point, approximately 1100 °F, (600 °C).
- If you must use Pb solder on a PCB manufactured using PbF solder, remove as much of the original PbF solder as possible and be sure that any remaining is melted prior to applying the Pb solder.
- When applying PbF solder to double layered boards, please check the component side for excess which may flow onto the opposite side (See figure, below)



1.4.1. Suggested Pb free solder

We recommend you to use the following solder when you re-solder components for repair. Before using other Pb free solder than the following solder, be sure to confirm a solder maker you appoint has made license agreements to be required when using Pb free solder legally.

Supplier: Senju Metal Industry Co., Ltd. (<http://www.senju-m.co.jp>)

Part Description in Senju: EcoSolder RMA02 P3 M705 Series

2 SPECIFICATIONS

Item		Model No.	
		KV-S3105C Series ^{*1}	KV-S3085 Series ^{*2}
Scanner	Scanning face	Duplex	
	Scanning method	Sheet feed type CCD (Front and back sides) Selectable back ground color (Black or White)	
	Readout speed	Binary A4 200 dpi portrait Simplex: 100 ppm Duplex: 180 ipm JPEG Color A4 200 dpi portrait Simplex: 100 ppm Duplex: 174 ipm	Binary A4 200 dpi portrait Simplex: 85 ppm Duplex: 160 ipm
	Resolution	400 dpi (Optional resolution)	
	Image output	Binary 8 bit grayscale 24 bit color MultiStream (Binary+8 bit grayscale or Binary+24 bit color)	Binary 8 bit grayscale 24 bit color (Require option) MultiStream [Binary+8 bit grayscale or Binary+24 bit color (Require option)]
	Image Processing	Image emphasis, Dither (64 step gradation), Error diffusion (64 step gradation), Dynamic threshold, Automatic separation, Multi-Color dropout, Mirror image, Noise reduction	
	Other function	Patch code detection (Kodak patch 2,3,T) Control sheet	
	Paper	Size	Image Size (Maximum) Width: 302 mm (11.7 in.) Length: 2540 mm (100 in.) Feeding Size Minimum Width: 48 mm (1.9 in.) Length: 70 mm (2.8 in.) Maximum Width: 297 mm (11.7 in.) Length: 432 mm (17 in.)
		Thickness	Single paper feed: 0.04-0.2 mm (1.6-7.9 mils) Continuous feed: 0.06-0.2 mm (2.4-7.9 mils) Note: 1 mils=1/1000 in.
		Weight	Single paper feed: 30-157 g/m ² (8-42 lb.) Continuous feed: 50-157 g/m ² (13-42 lb.) Business card is thicker than 127 g/m ² (34 lb.) Note: 1 lb.=3.75 g/m²
		Detection	Empty, Size, Jam, Skew, and Double-feed detections
	Interface	Ultra wide SCSI (68 pin) / USB 2.0 Multi Interface	
	Hopper capacity	1000 sheets: 64 g/m ² (17 lb.)	
Unit	External dimensions (Width×Depth×Height)	627×546×415 mm (24.7×21.5×16.4 in.)	
	Weight	52 kgf (114.4 lbs.)	
	Image memory (Standard)	256 MB	64 MB
	External image memory	DIMM port: 1 slot	
	Power requirement	AC 100-120 V, 50/60 Hz AC 220-240 V, 50/60 Hz	
	Power consumption	Maximum (Scanning)	3.0 A (AC 100-120 V) 1.5 A (AC 220-240 V)
		Minimum (Standby)	0.7 A (AC 100-120 V) 0.5 A (AC 220-240 V)
		Sleep mode	10 W (AC 100-120 V) 11 W (AC 220-240 V)
Environment	Operating temperature and Humidity	Temperature: 15 °C to 30 °C (59 °F to 86 °F) Humidity: 20 % to 80 % RH	
	Storage temperature and Humidity	Temperature: 0 °C to 35 °C (32 °F to 95 °F) Humidity: 10 % to 80 % RH	
Accessories		Installation manual, Maintenance manual, AC Cord, USB 2.0 Cable, Blower, Cleaning paper, CD-ROM [ISIS Driver, Capture software (RTIV), Operation manual, P.I.E. manual, RTIV manual, Control sheet images], Shading paper	
PbF (Pb Free)		Applied to PCB assemblies CONTROL, INTERFACE, MOTHER, CCD, DRIVE, PANEL, SIZE, HOPPER [CONNECTOR], HOPPER [POSITION], HOPPER [ANGLE], POINTER, EXIT [FRONT], POST IMPRINTER DOOR, RELAY [LOWER], RELAY [UPPER], SKEW (L), SKEW (R), JAM, RETARD [POSITION], FAN RELAY 1, FAN RELAY 2, LCD, and POWER Boards for KV-S3105C Series and KV-S3085 Series. Note: Distinction of PbF PCB PCBs (manufactured) using lead free solder will have a PbF stamp on the PCB.	

Item	Model No.	
	KV-S3105C Series ^{*1}	KV-S3085 Series ^{*2}
Option	Roller Exchange Kit (KV-SS026)	
	Roller Exchange Kit for thin paper (^{*3} KV-SS027)	
	Imprinter Unit (KV-SS028), Ink cartridge (KV-SS021)	
	Roller cleaning paper (KV-SS03)	
	—	Color upgrade kit (KV-SS029)

Note:^{*1} : KV-S3105C Series

For U.S.A. and Europe: KV-S3105C

For China: KV-S3105CCN

SERIAL No. shown on the name plate on each Scanner will distinguish the destinations for each area as follows.

1. SERIAL No. for U.S.A. and Europe → 807 xxxxx

2. SERIAL No. for China → 825 xxxxx

(x: Don't care)

^{*2} : KV-S3085 Series

For U.S.A. and Europe: KV-S3085

SERIAL No. shown on the name plate on each Scanner will distinguish the destinations for each area as follows.

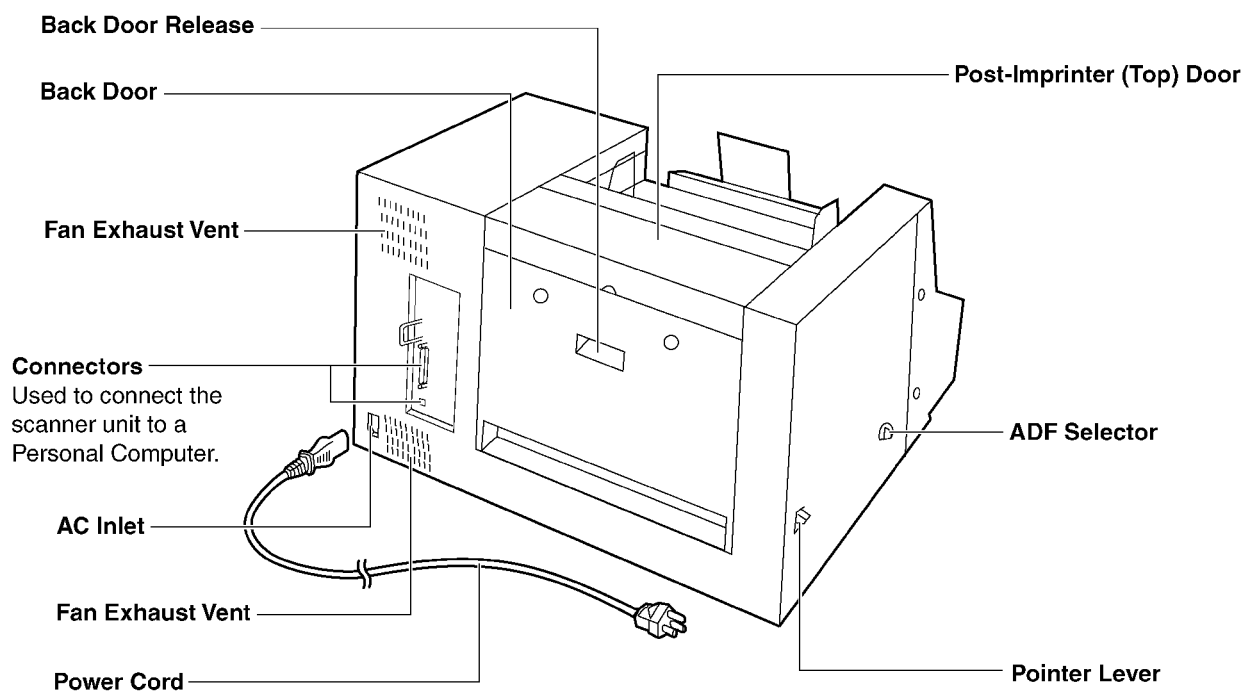
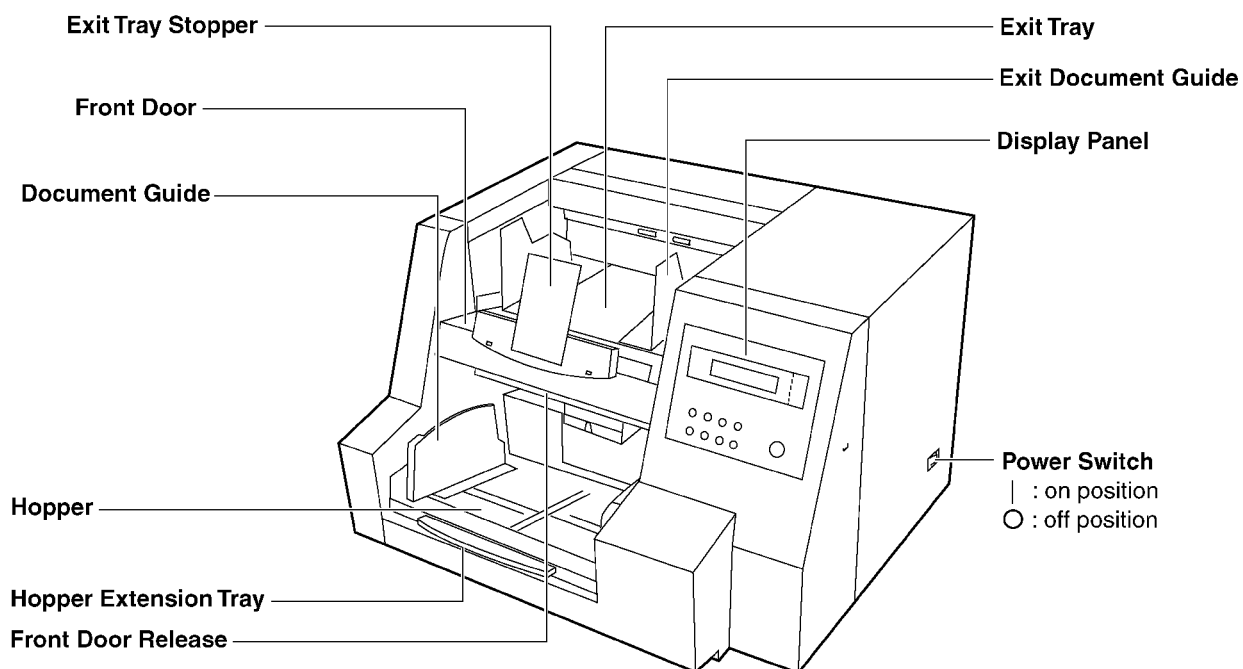
SERIAL No. for U.S.A. and Europe → 813 xxxxx

(x: Don't care)

^{*3} : KV-SS027

This kit will be effective in case thin paper's (less than 50 g/m²) jam frequently occurs at the paper-feed block attached as the standard.

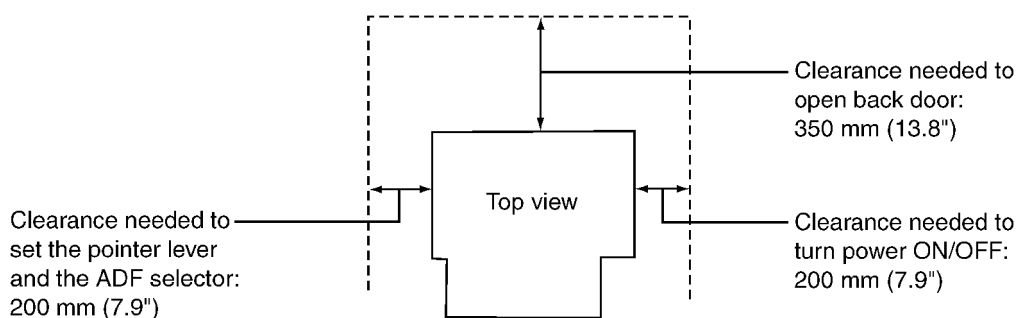
3 COMPONENT IDENTIFICATION



4 INSTALLATION

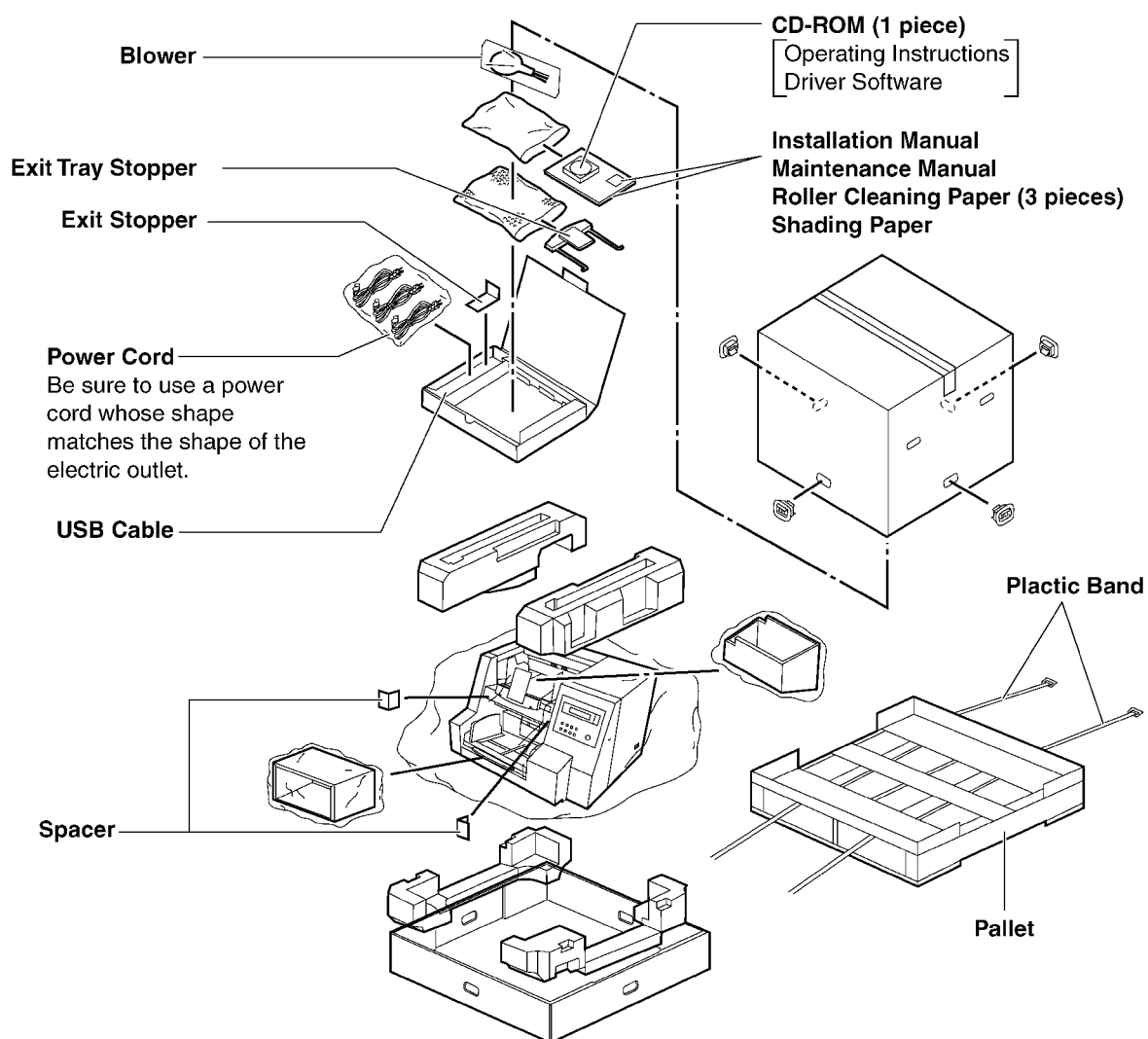
4.1. Minimum Space Requirements

Be sure to maintain the recommended space requirements for proper ventilation.



4.2. Unpacking

Check all parts are included before installing the scanner.

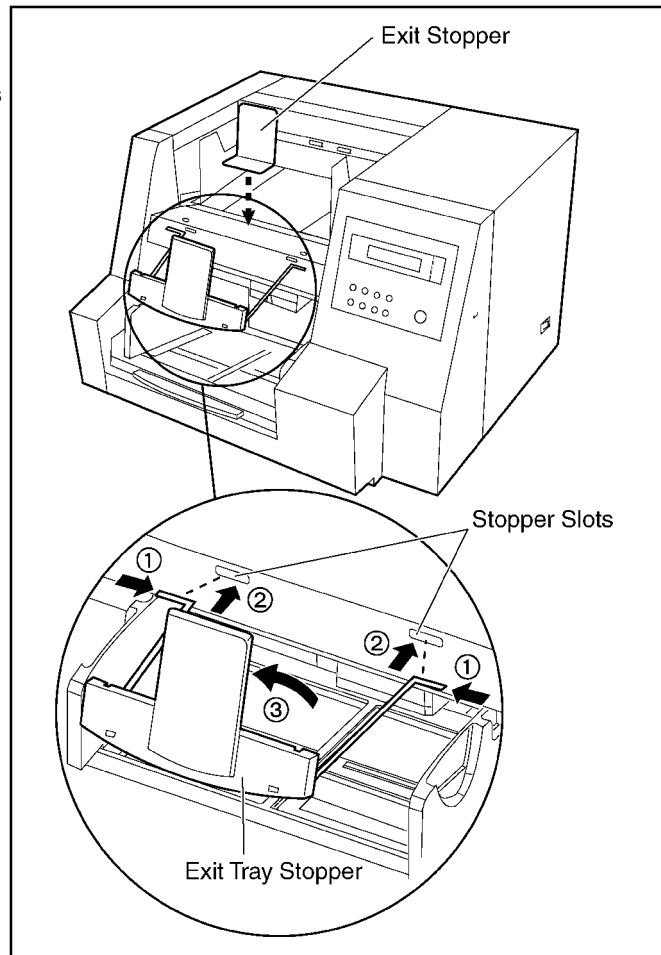


Note:

It is highly recommended to keep the original carton and all packing materials. They are necessary when repacking.

4.3. Installing the Exit tray stopper and Exit stopper

- (1) Position the Exit Stopper according to the scanned document's size.
- (2) Squeeze the metal guides of the Exit Tray Stopper guides slightly, and insert them into the stopper slots. Then pull up the plastic part of the Exit Tray Stopper. (Install the stopper in the sequence of 1 through 3.)



4.4. DIMM Module Extension

A maximum of 512 MB extended memory may be required depending on the combination of the paper size, mode, and resolution.

To determine how much extended memory (Unit: MB) is required on each condition, refer to Fig.4.4.1.1 to Fig.4.4.4.2.

(Recommended DIMM)

- JEDEC-standard 168 pin, dual in-line memory module (DIMM)
- Single +3.3 V $\pm$ 0.3 V power supply
- Frequency / CAS Latency: 100 MHz/CL=2, 133 MHz/CL=2, 133 MHz/CL=3
- 64 MB, 128 MB, 256 MB, or 512 MB may be used.

Note:

Originally, INTERFACE Board for KV-S3105C Series has 256 MB memory as the basis.

And INTERFACE Board for KV-S3085 Series has 64 MB memory as the basis.

Fig.4.4.1.1: Simplex (For KV-S3105C Series)

x: Invalid

Mode	Size	dpi					
		100	200	300	400	500	600
Binary	SC's Max	0	0	0	0	0	0
	Double Letter	0	0	0	0	0	0
	Legal	0	0	0	0	0	0
	Letter	0	0	0	0	0	0
	A3	0	0	0	0	0	0
	A4	0	0	0	0	0	0
	A5	0	0	0	0	0	0
	A6	0	0	0	0	0	0
	B4	0	0	0	0	0	0
	B5	0	0	0	0	0	0
	B6	0	0	0	0	0	0
8bit Gray	SC's Max	0	0	0	0	64	256
	Double Letter	0	0	0	0	0	0
	Legal	0	0	0	0	0	0
	Letter	0	0	0	0	0	0
	A3	0	0	0	0	0	0
	A4	0	0	0	0	0	0
	A5	0	0	0	0	0	0
	A6	0	0	0	0	0	0
	B4	0	0	0	0	0	0
	B5	0	0	0	0	0	0
	B6	0	0	0	0	0	0
24 bit Color	SC's Max	0	0	128	512	x	x
	Double Letter	0	0	0	0	0	0
	Legal	0	0	0	0	0	0
	Letter	0	0	0	0	0	0
	A3	0	0	0	0	0	0
	A4	0	0	0	0	0	0
	A5	0	0	0	0	0	0
	A6	0	0	0	0	0	0
	B4	0	0	0	0	0	0
	B5	0	0	0	0	0	0
	B6	0	0	0	0	0	0

Fig.4.4.1.2: Simplex (For KV-S3085 Series)

x: Invalid

Mode	Size	dpi					
		100	200	300	400	500	600
Binary	SC's Max	0	0	0	0	0	0
	Double Letter	0	0	0	0	0	0
	Legal	0	0	0	0	0	0
	Letter	0	0	0	0	0	0
	A3	0	0	0	0	0	0
	A4	0	0	0	0	0	0
	A5	0	0	0	0	0	0
	A6	0	0	0	0	0	0
	B4	0	0	0	0	0	0
	B5	0	0	0	0	0	0
	B6	0	0	0	0	0	0
8bit Gray	SC's Max	0	0	64	256	256	512
	Double Letter	0	0	0	0	0	64
	Legal	0	0	0	0	0	0
	Letter	0	0	0	0	0	0
	A3	0	0	0	0	0	64
	A4	0	0	0	0	0	0
	A5	0	0	0	0	0	0
	A6	0	0	0	0	0	0
	B4	0	0	0	0	0	0
	B5	0	0	0	0	0	0
	B6	0	0	0	0	0	0
** 24 bit Color	SC's Max	0	128	512	x	x	x
	Double Letter	0	0	0	64	128	256
	Legal	0	0	0	64	64	128
	Letter	0	0	0	0	64	128
	A3	0	0	0	64	128	256
	A4	0	0	0	0	64	128
	A5	0	0	0	0	0	64
	A6	0	0	0	0	0	0
	B4	0	0	0	64	128	128
	B5	0	0	0	0	64	64
	B6	0	0	0	0	0	0

** Available only in case installing "Color upgrade kit (KV-SS029)" has been done.

Fig.4.4.2.1: Duplex (For KV-S3105C Series)

x: Invalid

Mode	Size	dpi					
		100	200	300	400	500	600
Binary	SC's Max	0	0	0	0	0	0
	Double Letter	0	0	0	0	0	0
	Legal	0	0	0	0	0	0
	Letter	0	0	0	0	0	0
	A3	0	0	0	0	0	0
	A4	0	0	0	0	0	0
	A5	0	0	0	0	0	0
	A6	0	0	0	0	0	0
	B4	0	0	0	0	0	0
	B5	0	0	0	0	0	0
	B6	0	0	0	0	0	0
8 bit Gray	SC's Max	0	0	0	256	512	x
	Double Letter	0	0	0	0	0	0
	Legal	0	0	0	0	0	0
	Letter	0	0	0	0	0	0
	A3	0	0	0	0	0	0
	A4	0	0	0	0	0	0
	A5	0	0	0	0	0	0
	A6	0	0	0	0	0	0
	B4	0	0	0	0	0	0
	B5	0	0	0	0	0	0
	B6	0	0	0	0	0	0
24 bit Color	SC's Max	0	64	512	x	x	x
	Double Letter	0	0	0	0	128	256
	Legal	0	0	0	0	0	64
	Letter	0	0	0	0	0	64
	A3	0	0	0	0	128	256
	A4	0	0	0	0	0	64
	A5	0	0	0	0	0	0
	A6	0	0	0	0	0	0
	B4	0	0	0	0	64	128
	B5	0	0	0	0	0	0
	B6	0	0	0	0	0	0

Fig.4.4.2.2: Duplex (For KV-S3085 Series)

x: Invalid

Mode	Size	dpi					
		100	200	300	400	500	600
Binary	SC's Max	0	0	0	0	64	64
	Double Letter	0	0	0	0	0	0
	Legal	0	0	0	0	0	0
	Letter	0	0	0	0	0	0
	A3	0	0	0	0	0	0
	A4	0	0	0	0	0	0
	A5	0	0	0	0	0	0
	A6	0	0	0	0	0	0
	B4	0	0	0	0	0	0
	B5	0	0	0	0	0	0
	B6	0	0	0	0	0	0
8 bit Gray	SC's Max	0	64	256	512	x	x
	Double Letter	0	0	0	64	64	128
	Legal	0	0	0	0	64	64
	Letter	0	0	0	0	0	64
	A3	0	0	0	64	64	128
	A4	0	0	0	0	0	64
	A5	0	0	0	0	0	0
	A6	0	0	0	0	0	0
	B4	0	0	0	0	64	64
	B5	0	0	0	0	0	64
	B6	0	0	0	0	0	0
** 24 bit Color	SC's Max	64	256	x	x	x	x
	Double Letter	0	0	64	256	512	512
	Legal	0	0	64	128	256	256
	Letter	0	0	64	64	128	256
	A3	0	0	64	256	512	512
	A4	0	0	64	64	128	256
	A5	0	0	0	64	64	128
	A6	0	0	0	0	0	64
	B4	0	0	64	128	256	512
	B5	0	0	0	64	128	256
	B6	0	0	0	0	64	64

** Available only in case installing "Color upgrade kit (KV-SS029)" has been done.

Fig.4.4.3.1: MultiStream (Simplex: For KV-S3105C Series)

x: Invalid

Mode	Size	dpi					
		100	200	300	400	500	600
Binary + 8 bit Gray	SC's Max	0	0	0	0	128	256
	Double Letter	0	0	0	0	0	0
	Legal	0	0	0	0	0	0
	Letter	0	0	0	0	0	0
	A3	0	0	0	0	0	0
	A4	0	0	0	0	0	0
	A5	0	0	0	0	0	0
	A6	0	0	0	0	0	0
	B4	0	0	0	0	0	0
	B5	0	0	0	0	0	0
	B6	0	0	0	0	0	0
Binary + 24 bit Color	SC's Max	0	0	128	512	x	x
	Double Letter	0	0	0	0	0	0
	Legal	0	0	0	0	0	0
	Letter	0	0	0	0	0	0
	A3	0	0	0	0	0	0
	A4	0	0	0	0	0	0
	A5	0	0	0	0	0	0
	A6	0	0	0	0	0	0
	B4	0	0	0	0	0	0
	B5	0	0	0	0	0	0
	B6	0	0	0	0	0	0

Fig.4.4.3.2: MultiStream (Simplex: For KV-S3085 Series)

x: Invalid

Mode	Size	dpi					
		100	200	300	400	500	600
Binary + 8 bit Gray	SC's Max	0	0	64	256	512	512
	Double Letter	0	0	0	0	0	64
	Legal	0	0	0	0	0	0
	Letter	0	0	0	0	0	0
	A3	0	0	0	0	64	64
	A4	0	0	0	0	0	0
	A5	0	0	0	0	0	0
	A6	0	0	0	0	0	0
	B4	0	0	0	0	0	64
	B5	0	0	0	0	0	0
	B6	0	0	0	0	0	0
** Binary + 24 bit Color	SC's Max	0	128	512	x	x	x
	Double Letter	0	0	64	64	128	256
	Legal	0	0	0	64	64	128
	Letter	0	0	0	0	64	128
	A3	0	0	64	64	128	256
	A4	0	0	0	64	64	128
	A5	0	0	0	0	0	64
	A6	0	0	0	0	0	0
	B4	0	0	0	64	128	256
	B5	0	0	0	0	64	64
	B6	0	0	0	0	0	0

** Available only in case installing "Color upgrade kit (KV-SS029)" has been done.

Fig.4.4.4.1: MultiStream (Duplex: For KV-S3105C Series)

x: Invalid

Mode	Size	dpi					
		100	200	300	400	500	600
Binary + 8 bit Gray	SC's Max	0	0	0	256	512	x
	Double Letter	0	0	0	0	0	0
	Legal	0	0	0	0	0	0
	Letter	0	0	0	0	0	0
	A3	0	0	0	0	0	0
	A4	0	0	0	0	0	0
	A5	0	0	0	0	0	0
	A6	0	0	0	0	0	0
	B4	0	0	0	0	0	0
	B5	0	0	0	0	0	0
	B6	0	0	0	0	0	0
Binary + 24 bit Color	SC's Max	0	128	512	x	x	x
	Double Letter	0	0	0	0	128	256
	Legal	0	0	0	0	0	128
	Letter	0	0	0	0	0	64
	A3	0	0	0	0	128	256
	A4	0	0	0	0	0	64
	A5	0	0	0	0	0	0
	A6	0	0	0	0	0	0
	B4	0	0	0	0	64	256
	B5	0	0	0	0	0	0
	B6	0	0	0	0	0	0

Fig.4.4.4.2: MultiStream (Duplex: For KV-S3085 Series)

x: Invalid

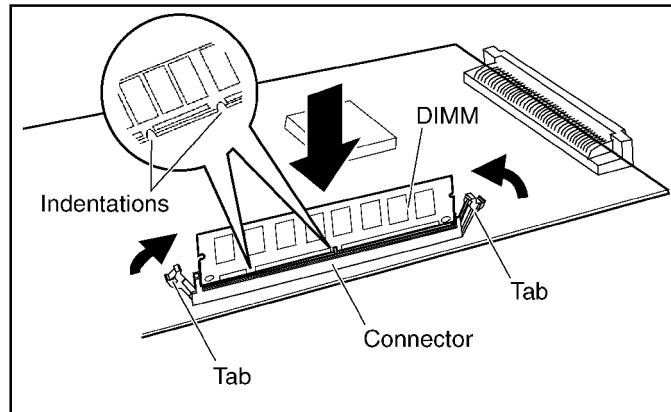
Mode	Size	dpi					
		100	200	300	400	500	600
Binary + 8 bit Gray	SC's Max	0	64	256	512	x	x
	Double Letter	0	0	0	64	64	128
	Legal	0	0	0	0	64	64
	Letter	0	0	0	0	64	64
	A3	0	0	0	64	128	128
	A4	0	0	0	0	64	64
	A5	0	0	0	0	0	0
	A6	0	0	0	0	0	0
	B4	0	0	0	64	64	128
	B5	0	0	0	0	0	64
	B6	0	0	0	0	0	0
**Binary + 24 bit Color	SC's Max	64	512	x	x	x	x
	Double Letter	0	0	128	256	512	512
	Legal	0	0	64	128	256	512
	Letter	0	0	64	64	128	256
	A3	0	0	128	256	512	512
	A4	0	0	64	64	256	256
	A5	0	0	0	64	64	128
	A6	0	0	0	0	0	64
	B4	0	0	64	128	256	512
	B5	0	0	0	64	128	256
	B6	0	0	0	0	64	64

** Available only in case installing "Color upgrade kit (KV-SS029)" has been done.

4.5. Installing DIMM Module

1. Remove the INTERFACE Board. (See 8.4.3.)
2. Insert the DIMM Module into the Connector on the INTERFACE Board and raise the tabs at the both ends of the connector until they lock into place.

Note: Make sure that indentations of the module are to the left and center.

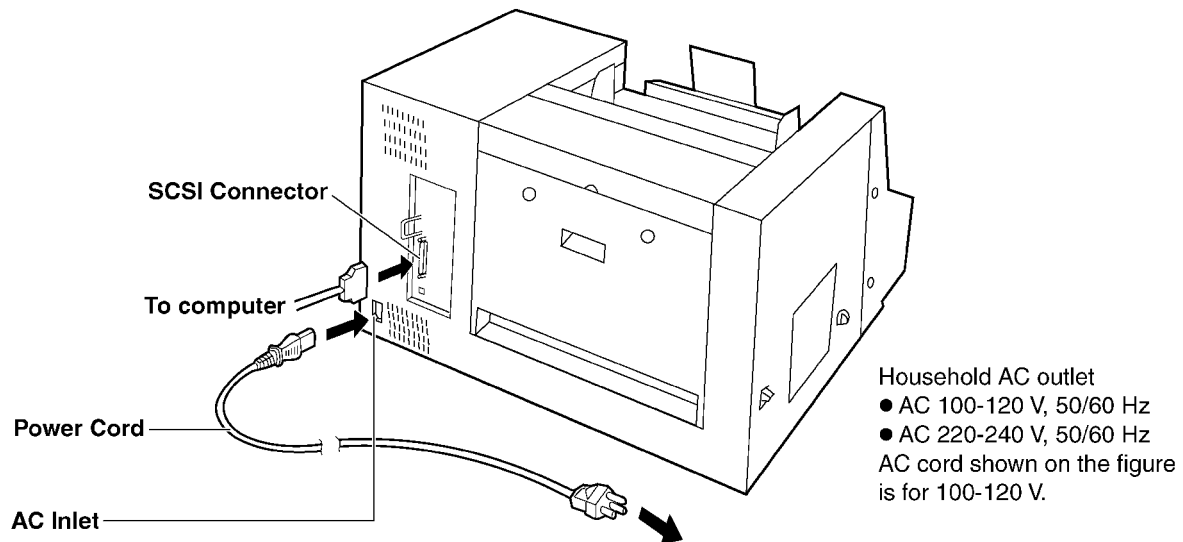


4.6. Connecting the Unit to a Personal Computer

Be sure to connect either USB or SCSI interface cable per scanner.

Note: Windows NT supports only SCSI interface.

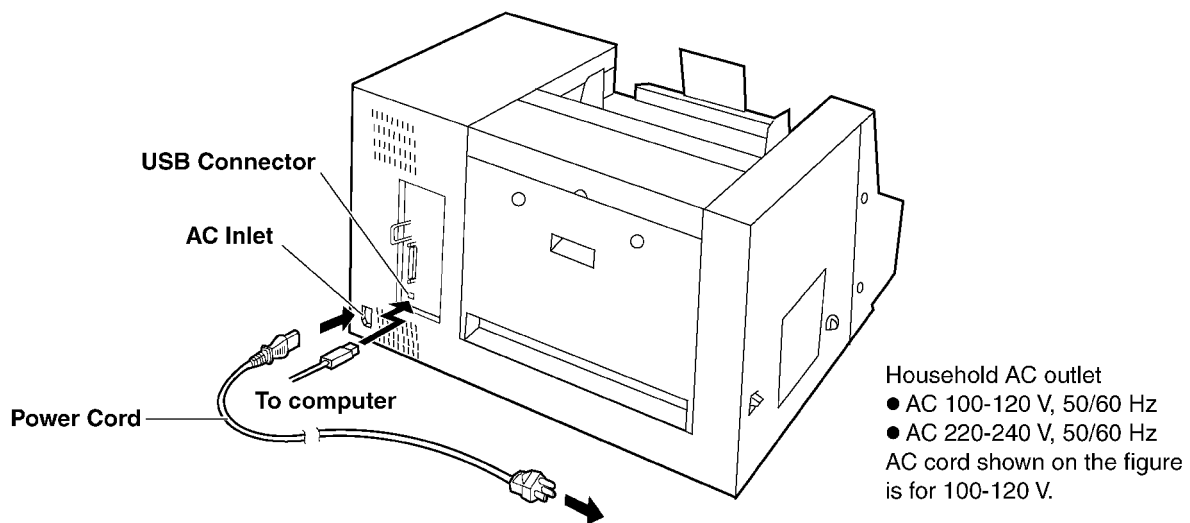
4.6.1. SCSI Connection



Caution:

1. Use the scanner accessory's Power Cord.
2. Use SCSI cables whose length are within 3 m (9.8 feet), securing SCSI specification.
3. After turning off the scanner and PC, remove SCSI cables.

4.6.2. USB Connection



Caution:

1. Use the scanner accessory's Power Cord.
2. Use the scanner's accessory USB cable.

4.7. System Requirements

When using the scanner, the required personal computer conditions are as follows.

		SCSI Connection	USB Connection
CPU		Minimum Pentium III, 1 GHz Recommended: Pentium 4, 2 GHz or higher	
Memory		Minimum: 256 MB Recommended: 512 MB or more	
OS		Windows® 98 Windows NT® 4.0 Windows® 2000 Windows® Me Windows® XP	Windows® 98 SE Windows® 2000 SP4 Windows® Me Windows® XP SP1
Display	Resolution	1,024×768 dots or more	
	Colors	65,536 colors or more	
Interface		SCSI III Recommended SCSI Board: Adaptec SCSI Board (29160/39160)	USB 2.0

Note 1:

1. This system requires 1 GB free space of HDD in the personal computer at least.
2. A color scanning beyond the conditions of A3 Size and 600 dpi may not be executed, based on Windows® 98 or Windows® Me.
And even based on another OS, a high resolution scanning may not be done.
3. The scanning speed differs depending on the personal computer's operating environment or application.
4. Be sure to connect the scanner directly to the USB interface port on PC.
We cannot guarantee that the scanner will work properly if it is connected to a USB hub.
5. A daisy-chain connection to the SCSI interface may not allow the scanner to realize the high speed scanning.
6. When using Windows NT®, be sure to install the ASPI layer software that the SCSI Board's vendor provides.

Note 2:

- Windows® 98 is Microsoft® Windows® 98 operating system.
- Windows® Me is Microsoft® Windows® Me operating system.
- Windows NT® is Microsoft® Windows NT® operating system.
- Windows® 2000 is Microsoft® Windows® 2000 operating system.
- Windows® XP is Microsoft® Windows® XP operating system.
- Microsoft®, Windows® and Windows NT® are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- Pentium® is a registered trademark of Intel Corporation.
- Each company's name or company product name is each company's trademark or registered trademark.

4.8. Setting the Language & SCSI ID

4.8.1. Setting the language

Select English, German or Japanese as the language which is to appear on the LCD display.

- (1) Turn on the scanner while pushing the **"HOME"** key.

S	e	t		L	a	n	g	u	a	g	e					←	→		
						E	n	g	l	i	s	h		L	e	t	t	e	r

↓ Push "▶" key once.

Note:

The language setting mode will appear automatically when the scanner is turned on for the first time just after the unit was unpacked.

- (2) Use the “▶” key or “◀” key to select “English Letter”, “English A4”, “Deutsch A4” or “ニホンゴ A4”.

S	e	t		L	a	n	g	u	a	g	e							←	→
					E	n	g	l	i	s	h							A	4

- (3) Press the **“HOME”** key to be ready.

[illegible]

4.8.2. Setting the SCSI ID

- (1) Press the **"OTHERS"** key.

0	1	.	V	e	r	s	i	o	n										
														M	1	.	0	0	

- (2) Press the “▲” key 3 times to display the SCSI ID.

0	3	.	S	C	S	I		I	D										
																N	o	.	6

- (3) Use the “▶” key or “◀” key to select the desired setting.

0	3	.	S	C	S	I		I	D										
																N	o	.	7

Note:

ID No. area depends on the Wide SCSI Setting.

(Wide SCSI: Disable)

→ 0 → 1 → 2 → 3 → 4 → 5 → 6 → 7 →

(Wide SCSI: Enable)

$$\rightarrow 0 \rightarrow 1 \rightarrow 2 \rightarrow 3 \rightarrow \dots \rightarrow 13 \rightarrow 14 \rightarrow 15 \rightarrow$$

4.9. Others

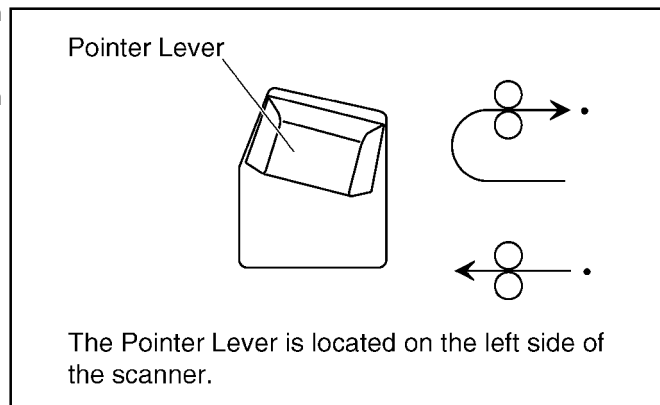
4.9.1. Selecting the paper path for scanned document

Change the Pointer Lever position as required.

- (1) When making the document exit to the upper-front position
→ Push the Pointer Lever upwards
- (2) When making the document exit to the lower-back position (Straight pass mode)
→ Push the Pointer Lever downwards

Note:

For thicker paper scanning, we recommend the straight paper path.



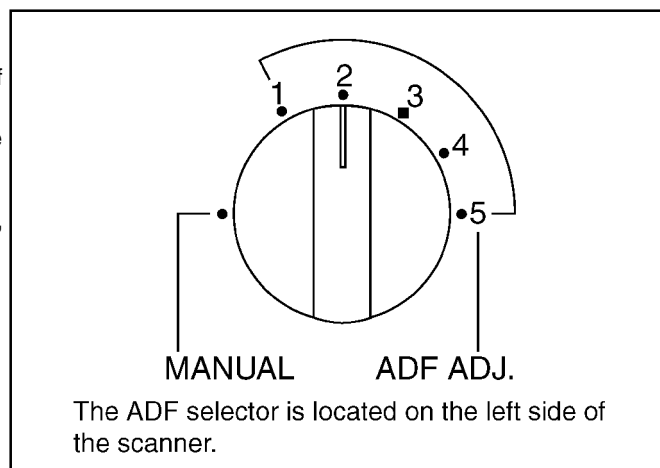
4.9.2. Setting the ADF Selector

Depending upon the paper quality, set the ADF Selector.

- (1) By setting the **ADF Selector** to "**MANUAL**" position, the Retard Roller is separated from the Separation Roller. By this operation, multiple sheet will be scanned as a piece of document.
(This selection is used in case of scanning documents one by one.)
- (2) On the other hand, by setting the **ADF Selector** to "**1, 2, 3, 4, or 5**" position, the Retard Roller exerts a manipulation force onto the documents, and the documents are separated by this manipulation.

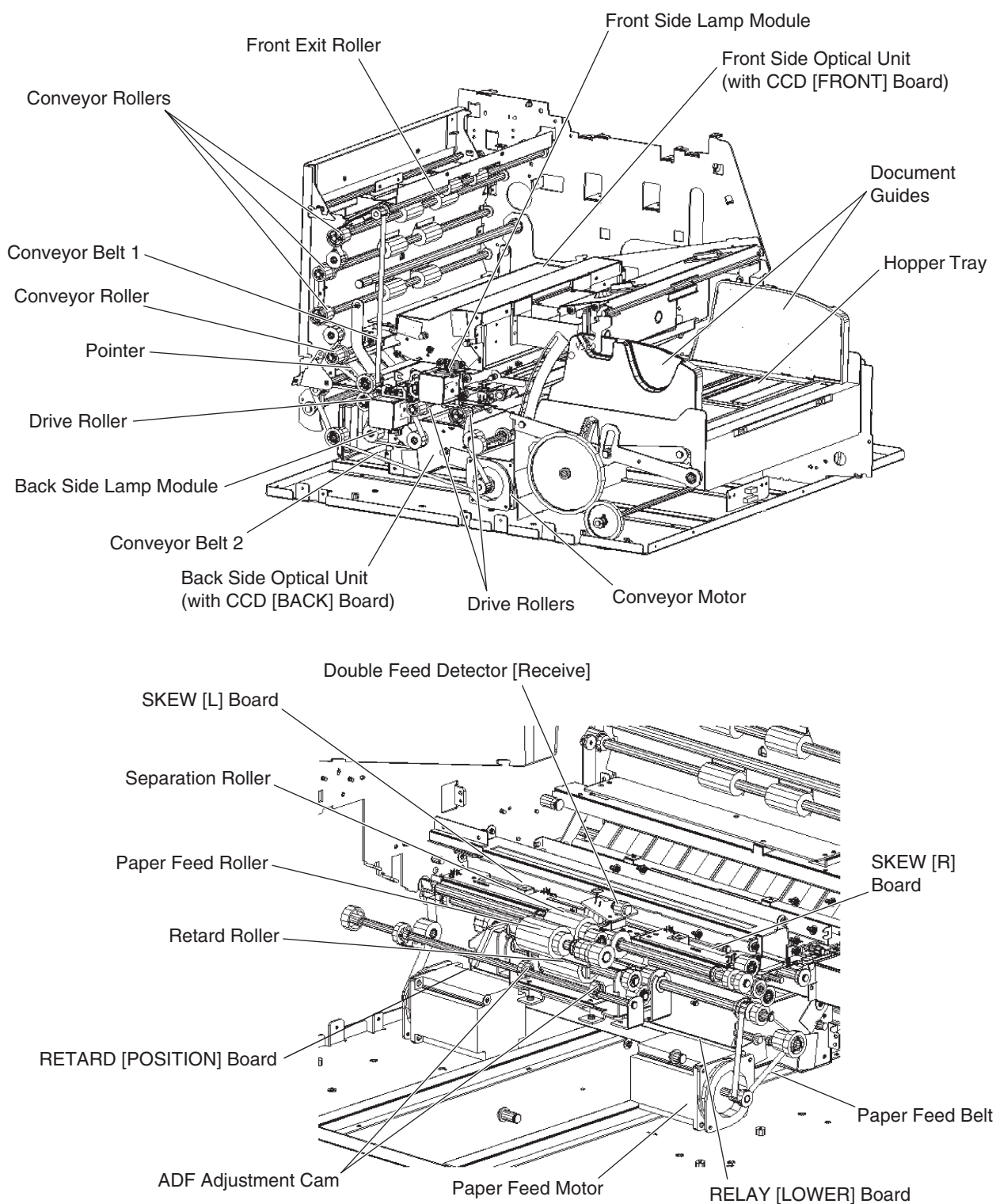
Note:

In proportion to the increment of the number (1→2→3→4→5) on the ADF Selector, the contact force between the Retard and Separation Rollers goes up.
(When scanning plain paper, set the selector to "2" or "3".)

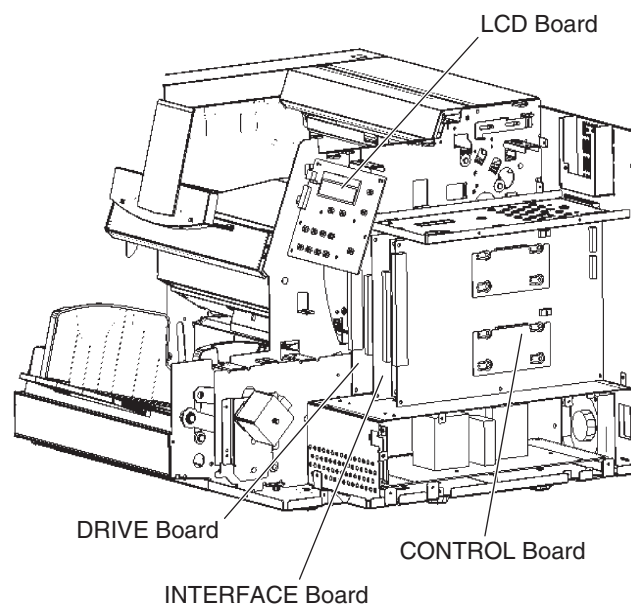
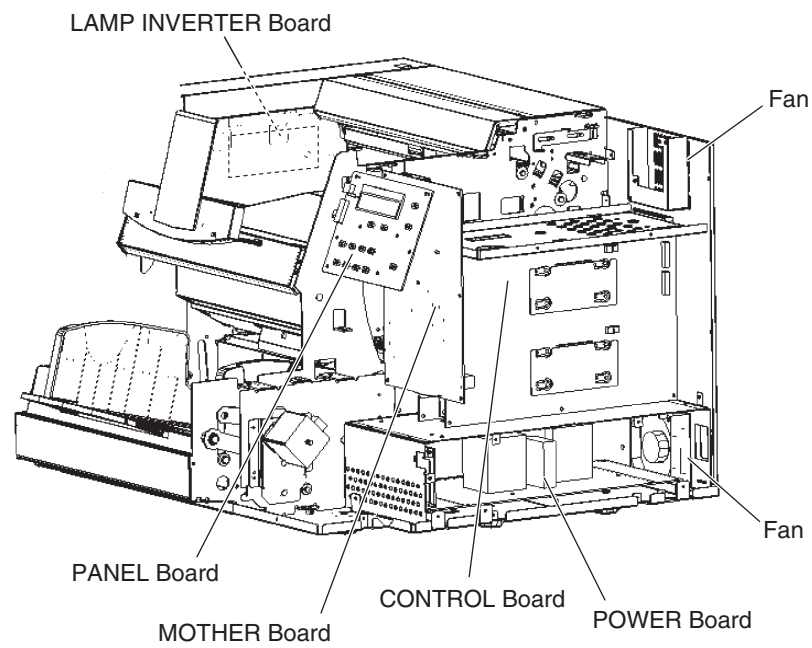


5 SECTIONAL VIEWS

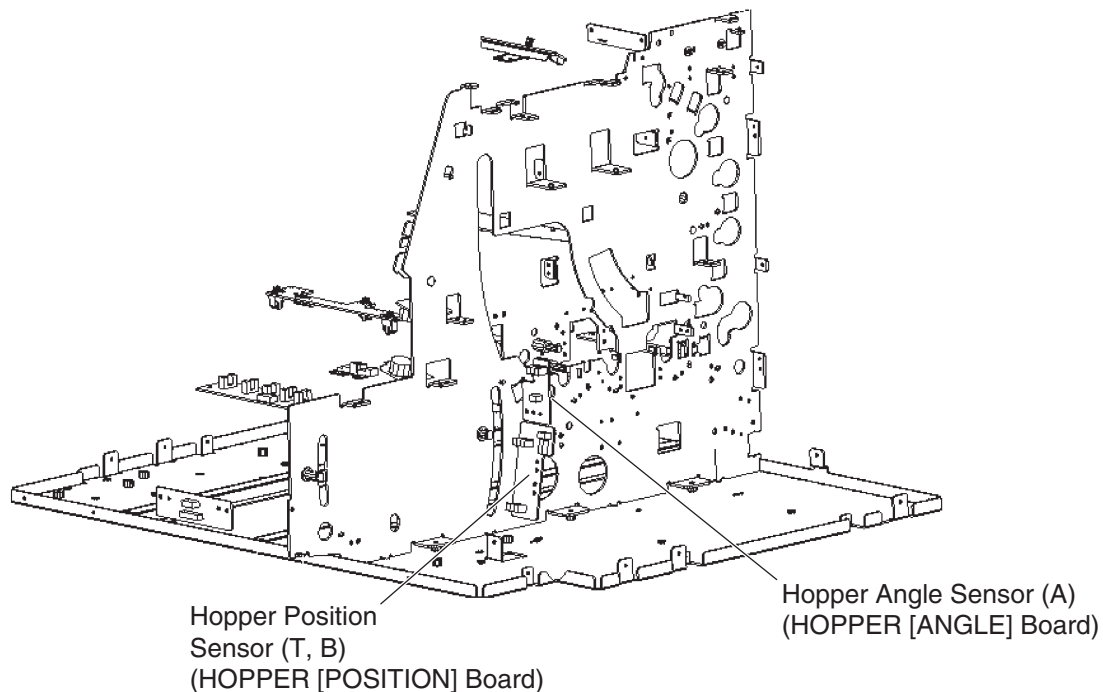
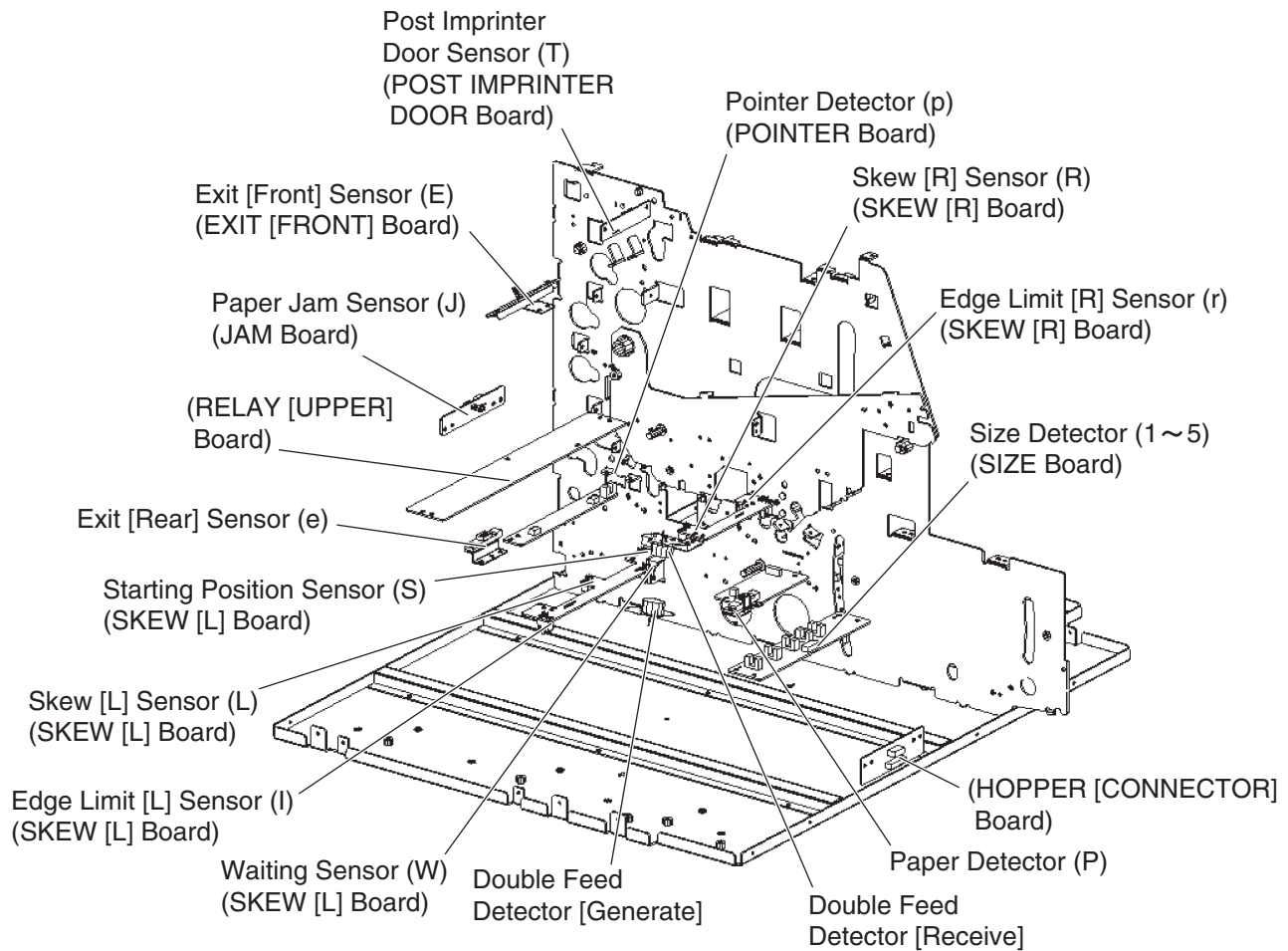
5.1. Motor and Mechanism



5.2. Circuit Boards



5.3. Sensors (Boards)



6 MECHANICAL FUNCTION

6.1. Paper Feed Mechanism

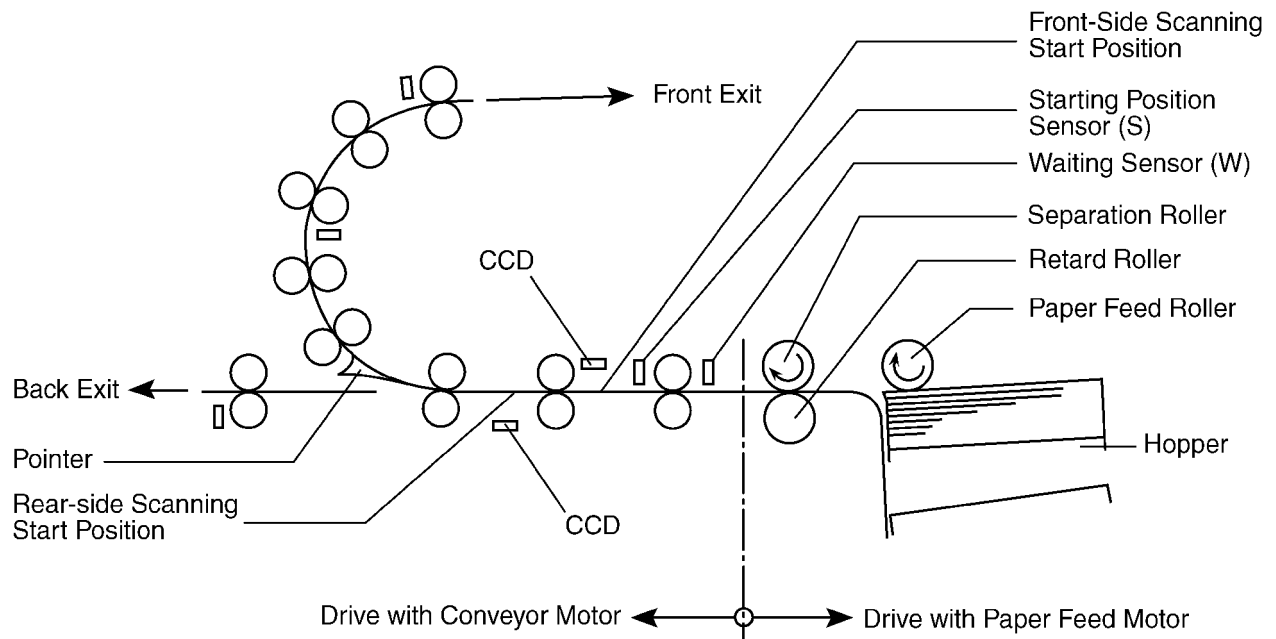


Fig. 6-1

1. When PC starts to output the scanning-start command signal after setting documents on the Hopper (detecting the document's existence by the Paper Detector), the Hopper goes up at the position which is good enough to attach the document to the Paper Feed Roller, and to feed papers.

Note

“Hopper position control mechanism” is shown in Fig. 6-5.

2. The Conveyor Motor starts to move to rotate the group of the Conveyor Rollers.
3. When the Paper Feed Motor starts, the Paper Feed Roller and the Separation Roller turn in feed direction (→). The Retard Roller is supported by a shaft fixed via a torque limiter, and it is pushed against the Separation Roller. When the document enters into the separation section, the Retard Roller exerts a manipulation force onto the document, which depends on the set torque. In case of continuous paper feed, the document is separated by this manipulation force and is fed to the reading section. When multiple sheets are fed, the Retard Roller is pushed down by the cam action when the ADF Separator is turned all the way to the left, so that it separates from the Separation Roller and is retracted from the transport surface. By this, the document is not manipulated and is fed to the reading section.
4. When the leading edge of the manuscript having passed the separation section passes the Waiting Sensor, the Paper Feed Motor stops and the Paper Feed Roller and the Separation Roller turn together.
5. When the leading edge of the document passes the Starting Position Sensor, reading starts after a specified timing (the time required for transport from the Starting Position Sensor to the reading position).
6. When the trailing edge of the document passes the Waiting Sensor and the buffer memory can hold four pages or more, the Paper Feed Motor starts again and the next document is fed.
7. Afterwards, the steps (3) to (6) are repeated.
8. When the trailing edge of the document passes the Waiting Sensor and the buffer memory does not have space for four pages or more, the Paper Feed Motor starts again, the next document is fed, and when the leading edge of the next document has passed the Waiting Sensor, the Paper Feed Motor stops and standby is performed until the next read command comes from the PC.
9. When a read command comes from the PC, the Paper Feed Roller starts again and the standby document is fed to the reading section.
10. Afterwards, the steps (3), (4), (5), (8), and (9) are repeated.

6.2. Feed Roller Mechanism

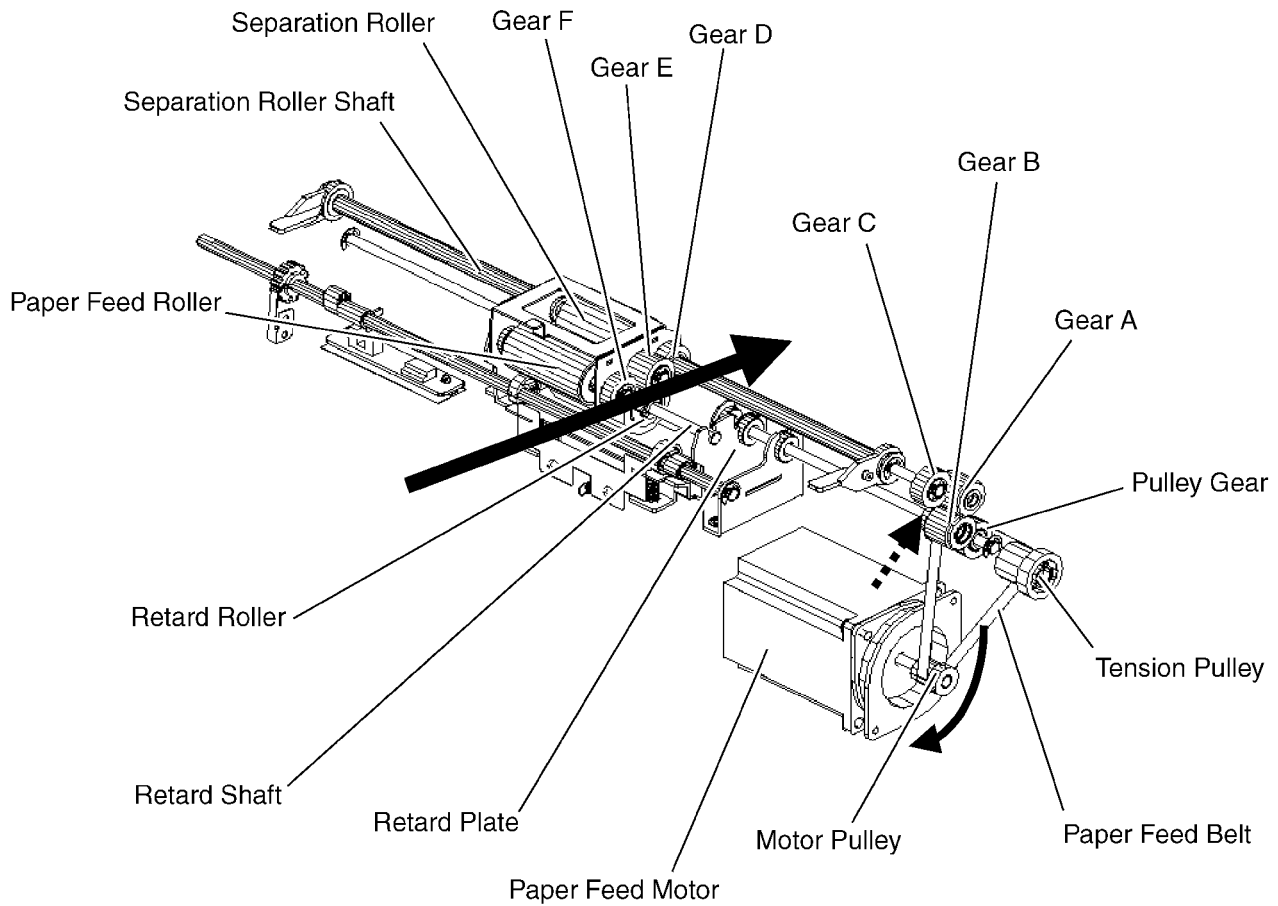


Fig. 6-2

The rotation of the Paper Feed Motor in arrow direction is transmitted to the Separation Roller via the Motor Pulley, the Paper Feed Belt, the Pulley Gear, the Gears A, B, and C, and the Separation Roller Shaft, it is also transferred to the Paper Feed Roller via the Gears D, E, and F, and the Paper Feed Roller and the Separation Roller are driven in the document feed direction indicated by the bold arrow. The Retard Roller is in contact with the Retard Shaft via a torque limiter, and as the Retard Shaft is supported by the U-groove of the Retard Mounting Plate, the built-in torque limiter of the Retard Roller operates and prevents entry of the second or further documents when more than one document is fed at a time.

6.3. Retard Roller Mechanism

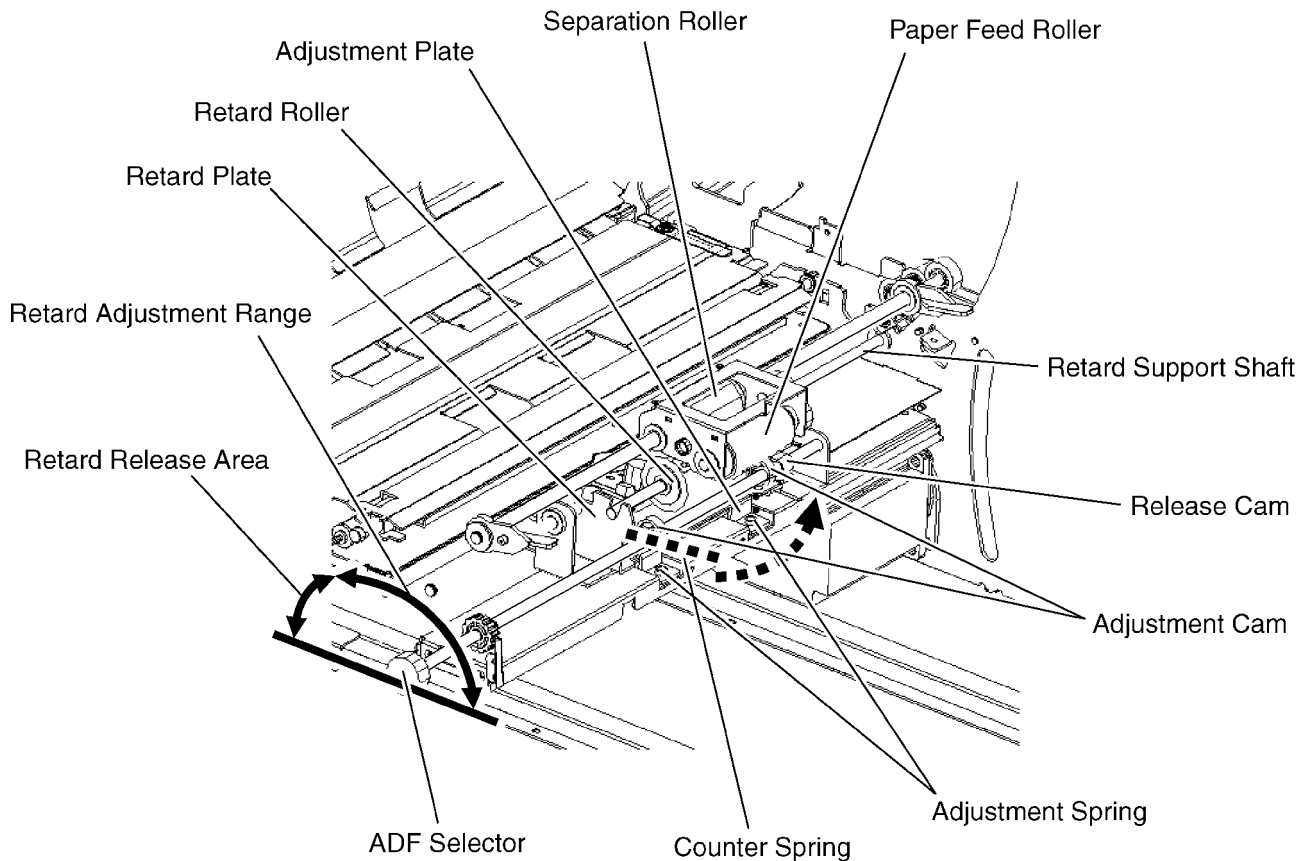
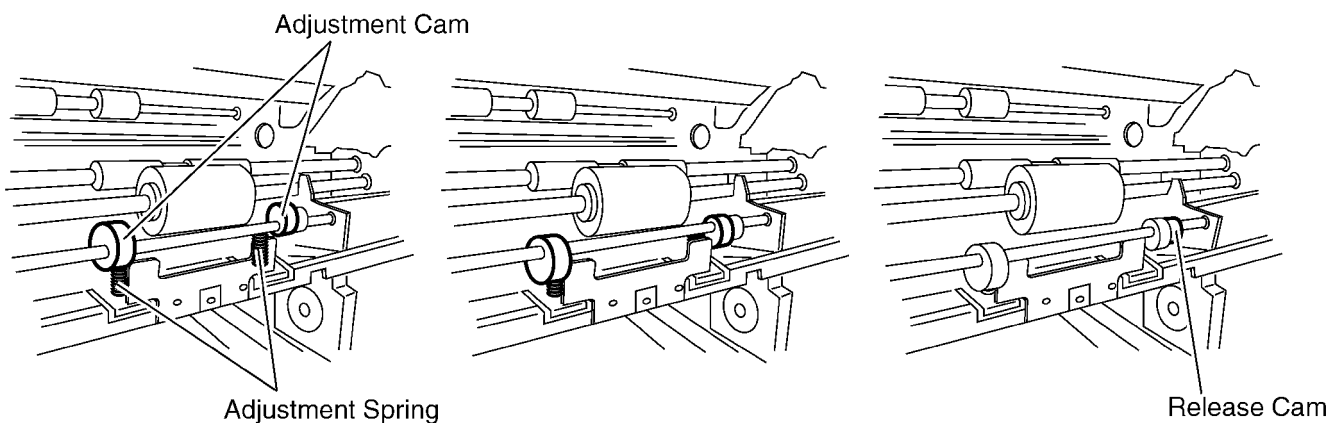


Fig. 6-3

The Retard Roller is supported by the Retard Plate. The Retard Plate is supported so that it can oscillate around the Retard Drive Shaft at the center, and as the Retard Plate is pulled in arrow direction by the counter spring (tension coil spring), a rotation moment in arrow direction ($\curvearrowright$) is generated with the Retard Support Shaft at the center, and an upward pressure is generated by contact with the Separation Roller. The Pressure Adjustment Plate is supported so that it can oscillate around the Retard Support Shaft at the center, and composition is so that the Retard Plate is pushed down by the Adjustment Cam via the Pressure Adjustment Spring (Compression Coil Spring). The Adjustment Cam turns the cam by turning the adjustment knob 120° left and right by means of a cylindrical cam eccentric in regard to a shaft arranged in parallel to the Retard Drive Shaft, the Pressure Adjustment Plate is pushed down, the tension force of the counterspring is balanced corresponding to the compression force of the Adjustment Spring, and the upward pressure of the Retard Roller is adjusted. The possible movement angle of the adjustment knob is 180°, and when it is turned in counterclockwise direction, the push pressure is varied for the first 120°, while the pressure adjustment plate is pushed down by the Release Cam during the last 60° to separate the Retard Roller from the Separation Roller.



The release cam pushes the Retard Plate down for separation.

6.4. Conveyor Roller Mechanism

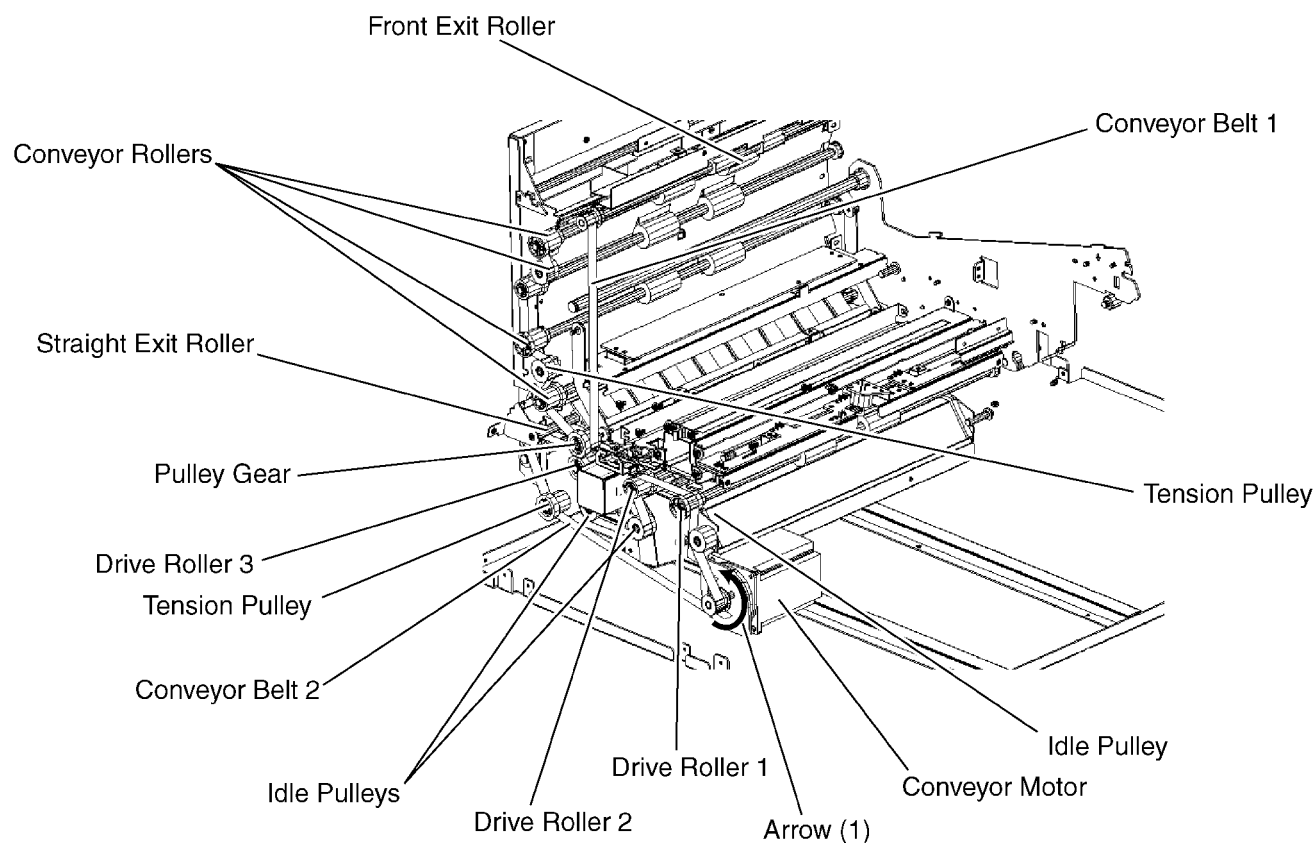


Fig. 6-4

The Drive Rollers 1, 2, and 3 and the Straight Exit Roller are driven by the Conveyor Motor via the Conveyor Belt 2. The Conveyor Roller and the Front Exit Roller are driven from the Conveyor Belt 2 via the Pulley Gear and the Conveyor Belt 1. Belt Tension is applied to the Conveyor Belts 1 and 2 by the tension force of the spring of the Tension Pulley installed at one place each for each belt. When a tension force in excess of the Spring Tension is applied to the belt, motor step-out and other problems may occur, so that only the spring shall be used to apply tension. The Conveyor Motor runs in direction of the Arrow(1), and it rotates always during document reading.

6.5. Hopper Mechanism

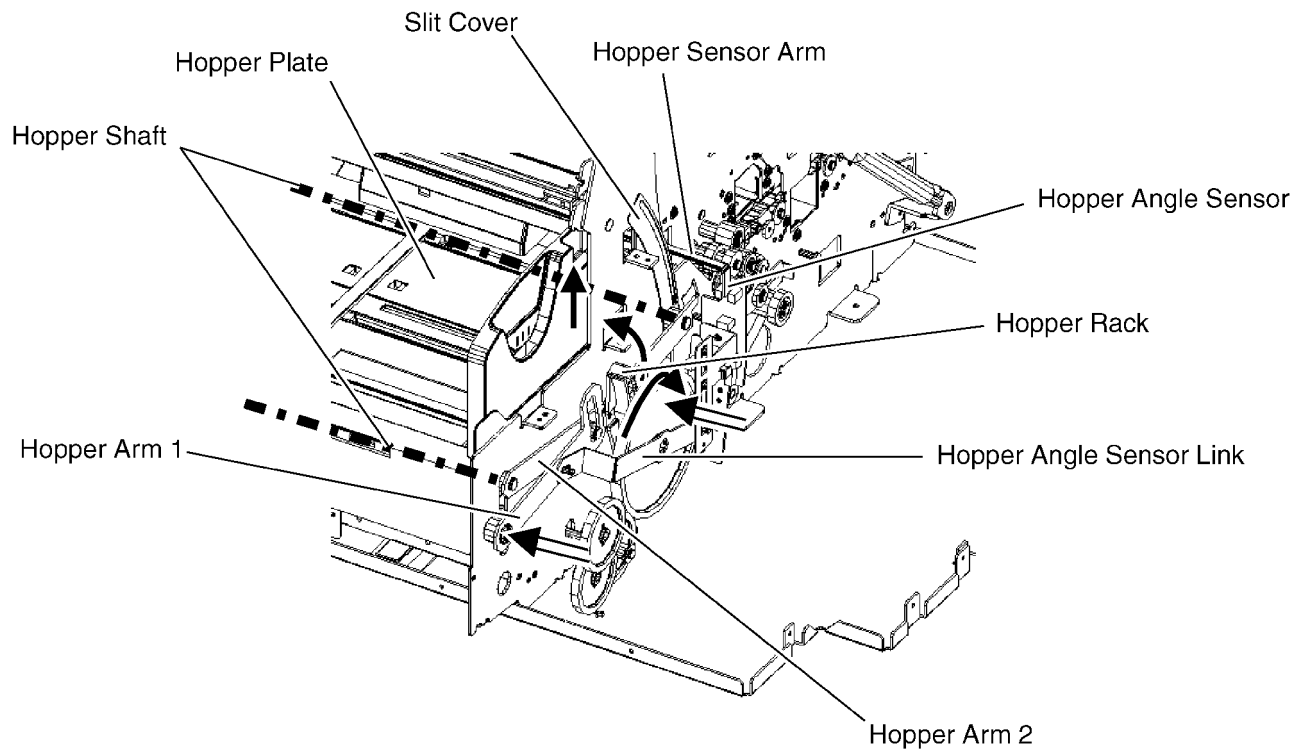
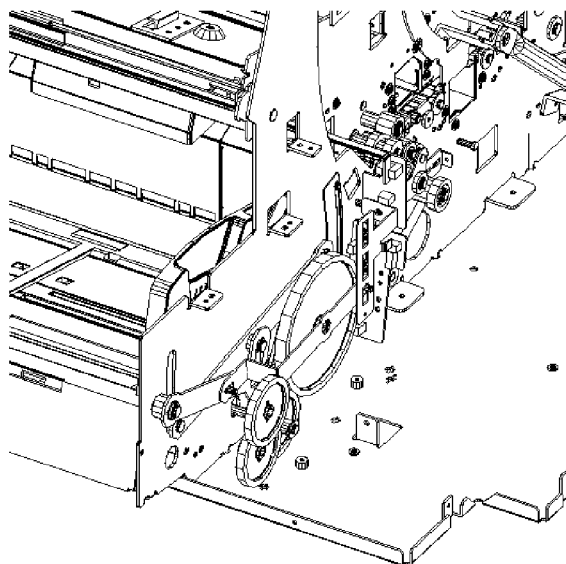


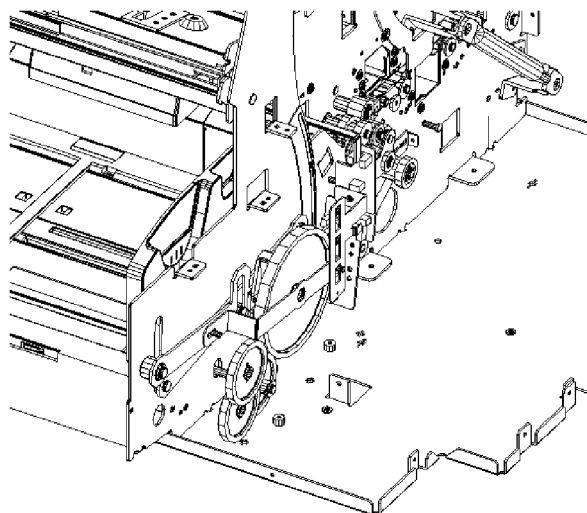
Fig. 6-5

1. The Hopper Plate is placed onto the Hopper Shaft (-----) not shown in the above figure.
2. The Hopper Arm 1 is coupled to a pin on the Main Chassis at the front side of the Hopper, so that it can oscillate freely, and the Hopper Arm 2 is coupled to a pin on the Main Chassis at the rear side of the Hopper (← part) in the same way, and in both cases the other end is coupled to the Hopper Shaft.
3. The Hopper rack is installed to the Hopper Arm 1 so that a part of the gear with the center at the oscillating support is engaged, and at the gear side, this rack is engaged with the Hopper Motor not shown in the figure.
4. The pin of the Hopper Arm 2 is engaged with the elongated hole at the intermediate part of the Hopper Arm 1, and when the Hopper Motor runs in counterclockwise direction as seen from the output shaft, the rack mentioned above oscillates in upward direction with the support of the Hopper Arm 1 at the center, and the front side of the Hopper Plate rises. Movement in arrow (→) direction.
5. When the Hopper Arm 1 exceeds the position where the elongated hole comes into contact with the pin of the Hopper Arm 2, the Hopper Arm 2 is coupled with the Hopper Arm 1, moves up with the support at the center, and the rear edge of the Hopper Plate moves up.
6. By this series of operations, the Hopper Plate posture changes from the bottom position via an intermediate inclined posture to a level posture, and after becoming level, it rises in this posture. The reverse movement is used to go down.

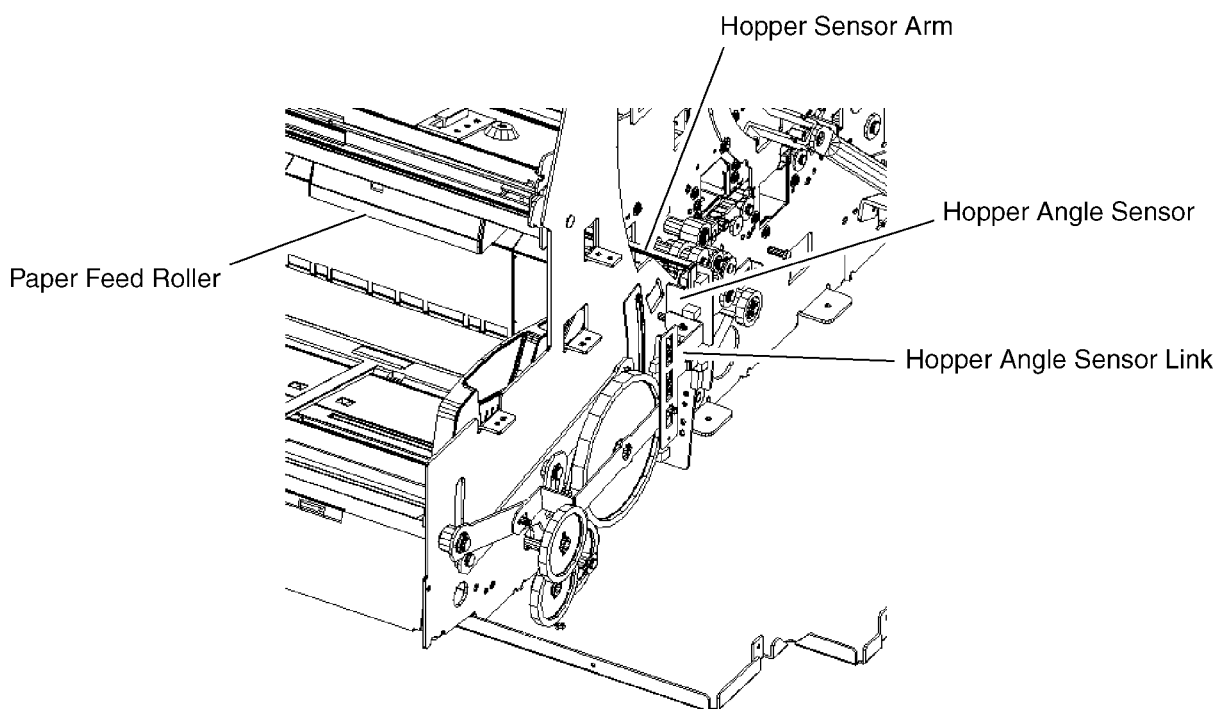
Bottom position (capacity about 1000 sheets)



Intermediate position (capacity about 200 sheets)

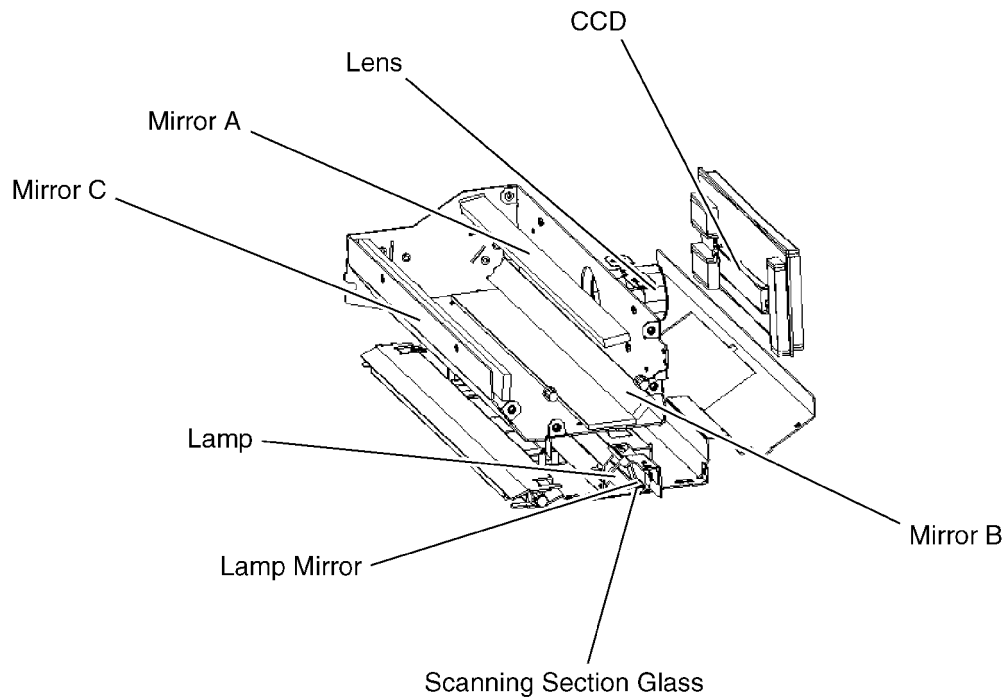


7. The Paper Feed Roller changes the contact angle with the original according to the inclination angle of the Hopper Plate in order to effect stable feed of the original to the Separation Roller section in regard to changes in the angle of the Hopper Plate.



8. The Paper Feed Roller is installed so that it can oscillate around the Separation Roller Drive Shaft, and when the Paper Feed Roller is pushed up via the original by the rise of the Hopper, the Hopper Sensor Arm (installed on the subshaft so that it can oscillate) is pushed up.
9. The inclination angle of the Hopper Plate is detected by the position of the Angle Sensor, where the oscillation motion of the Hopper Arm 1 is converted to vertical movement of the Hopper Angle Sensor via the Hopper Angle Sensor Link. The Hopper Sensor Link is installed so on the Hopper Drive Gear (arrow A) that it can oscillate. When the Hopper Arm 1 in the above figure oscillates up in arrow direction, the Hopper Angle Sensor Link pulls the Hopper Angle Sensor down. When the Hopper Plate is at the position corresponding to switching to a level posture, the Angle Sensor comes into contact with a stopper (not shown in the figure), and the detection position does not move down any further.
10. The Hopper Sensor arm is constructed so that it interrupts the light to the photo interrupter of the Hopper Angle Sensor, and at the position where the Angle Sensor has detected the Hopper Sensor Arm, the Hopper rise is stopped and the angle of the Paper Feed Roller is controlled to a posture corresponding to the inclination angle of the Hopper Plate.

6.6. Optical Unit Mechanism



The pick-up system of the KV-S3105C Series (or KV-S3085 Series) uses an optical system with the same reduction at the front and at the rear. The light source is an external white cathode tube, and a lamp mirror is installed opposite the lamp to increase the light volume. The front and the rear of the Lamp Module are composed of special modules, and lamp maintenance can be performed by pulling the Lamps from the left side to exchange them. The light path in the Optical Unit is as follows: The reflected light from the original surface is reflected by Mirror A → Mirror B → Mirror C, passes through the lens, and forms an image at the CCD sensor surface. The CCD is a 3-line color CCD with R, G, and B color filters.

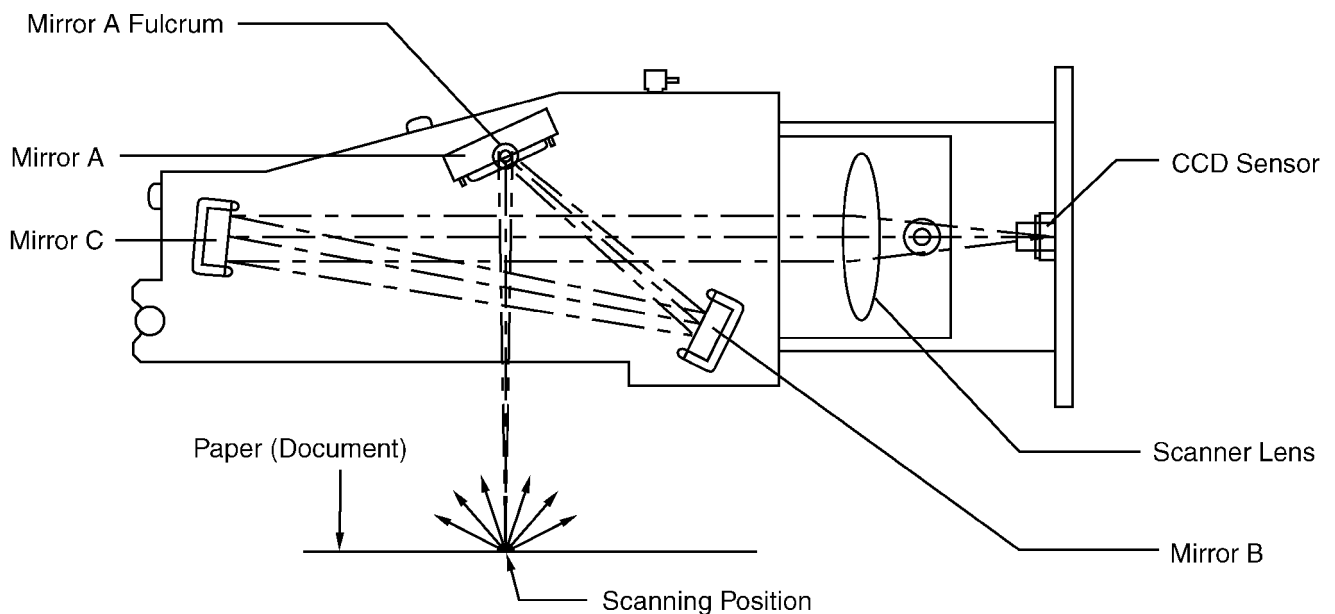


Fig. 6-6

6.7. Reference Plate

The Reference Plate opposite the scanning section glass has two colors, white at the front and black at the rear. Push the Reference Plate with your finger to the right (Arrow A). When the cut part H at the left edge of the Reference Plate Support Shaft comes out of the slide groove, the Reference Plate can turn freely and it can be reversed (Arrow B). When the left edge (Part C) of the Reference Plate is pushed lightly with a finger, the Reference Plate is returned to its original position by the return spring at the right edge of the Reference Plate Support Shaft.

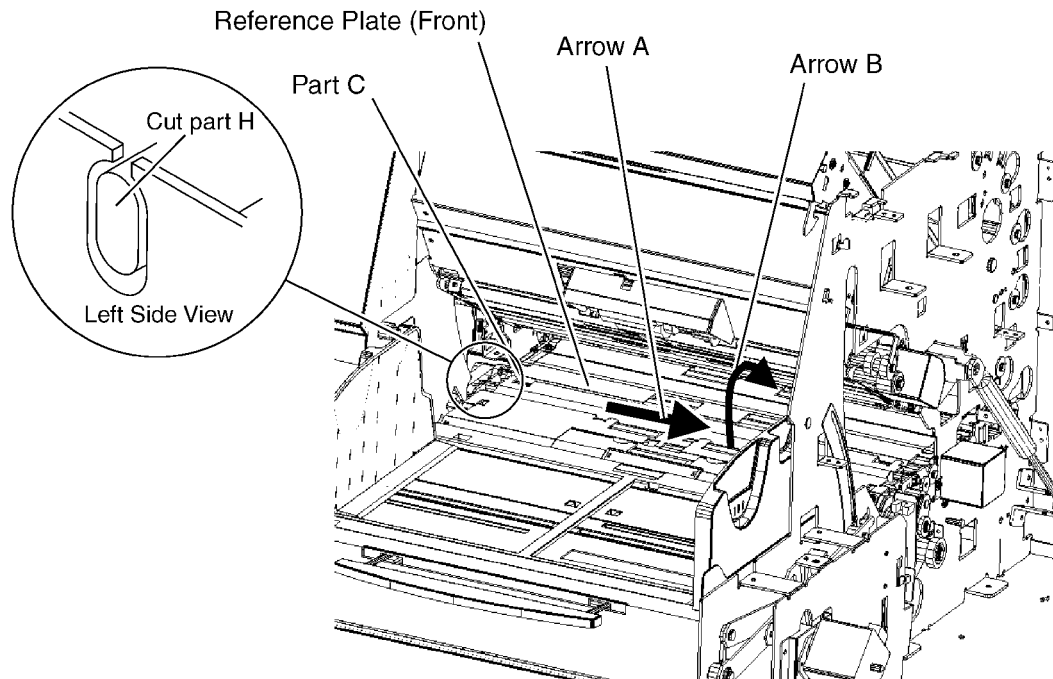
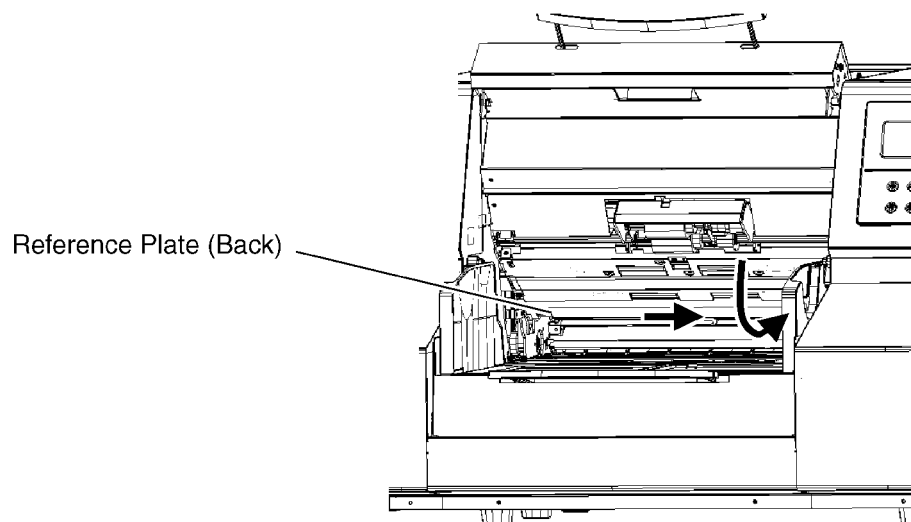


Fig. 6-7

In the same way, the rear reference plate can be reversed by sliding it to the right.

Note

- Do not close the door while the reference plate is at an intermediate position during the reversal. Breaking of the glass can occur.
- When the Reference Plate does not return back to the default position, the Front Door won't be able to be closed correctly. In this case, slide the Reference Plate to the left, while pressing the Plate.



7 MAINTENANCE

7.1. Maintenance Chart

C: Clean R: Replace (×1000 sheets)

Description	Ref. No.	20	40	60	80-260	280	300	Comments
Paper Feed Roller	Ref. No.5 in Sec.14.5	C	C	C	Clean each position every 20,000 sheet's being scanned.	C	R	Feed Roller
Separation Roller	Ref. No.4 in Sec.14.5	C	C	C		C	R	Separation Roller
Retard Roller	Ref. No.2 in Sec.14.3	C	C	C		C	R	Retard Roller
Retard Pad	Ref. No.17 in Sec.14.3	C	C	C		C	R	Pad Flame Assemble
Driver Roller 1	Ref. No.4 in Sec.14.2	C	C	C		C	C	Drive Roller F Assembly
Driver Roller 2	Ref. No.43 in Sec.14.2	C	C	C		C	C	Drive Roller 1-2 Assembly
Driver Roller 3	Ref. No.44 in Sec.14.2	C	C	C		C	C	Drive Roller 2 Assembly
Front Exit Roller	Ref. No.41 in Sec.14.2	C	C	C		C	C	Exit Roller Assembly
Straight Exit Roller	Ref. No.41 in Sec.14.2	C	C	C		C	C	Exit Roller Assembly
Conveyor Roller 1	Ref. No.43 in Sec.14.2	C	C	C		C	C	Drive Roller 1-2 Assembly
Conveyor Roller 2	Ref. No.42 in Sec.14.2	C	C	C		C	C	Drive Roller 1 Assembly
Conveyor Roller 3	Ref. No.43 in Sec.14.2	C	C	C		C	C	Drive Roller 1-2 Assembly
Conveyor Roller 4	Ref. No.42 in Sec.14.2	C	C	C		C	C	Drive Roller 1 Assembly
Target Glass (Front)	Ref. No.56 in Sec.14.5	C	C	C		C	C	Conveyor Up 1 Assembly
Target Glass (Back)	Ref. No.10 in Sec.14.2	C	C	C		C	C	Target Glass
Reference Plate (White)	Ref. No.6 in Sec.14.2, Ref. No.48 in Sec.14.5	C	C	C		C	C	Conveyor Up White
Reference Plate (Front Black)	Ref. No.7 in Sec.14.2	C	C	C		C	C	Conveyor Bottom Black
Reference Plate (Back Black)	Ref. No.49 in Sec.14.5	C	C	C		C	C	Conveyor Up 3B
Free Roller 1	Ref. No.4 in Sec.14.3, Ref. No.50 in Sec.14.5	C	C	C		C	C	Roller Assemble
Free Roller 2	Ref. No.70 in Sec.14.5	C	C	C		C	C	FR Free Roller
Free Roller 3	Ref. No.7 in Sec.14.3	C	C	C		C	C	Exit Free Roller

Note1

The above values for each maintenance item are registered in the maintenance counter, and the LCD informs the user when each condition occurs. All other counters can be observed using service mode.

Note2

This maintenance schedule was determined according to standard of paper, which can vary greatly between users. Therefore, the values can be customized for each user.

Note3

After scanning operations, the surfaces around the scanning section glass and reference plates may be hot. Wait for them to be cool before cleaning inside the scanner.

Note4

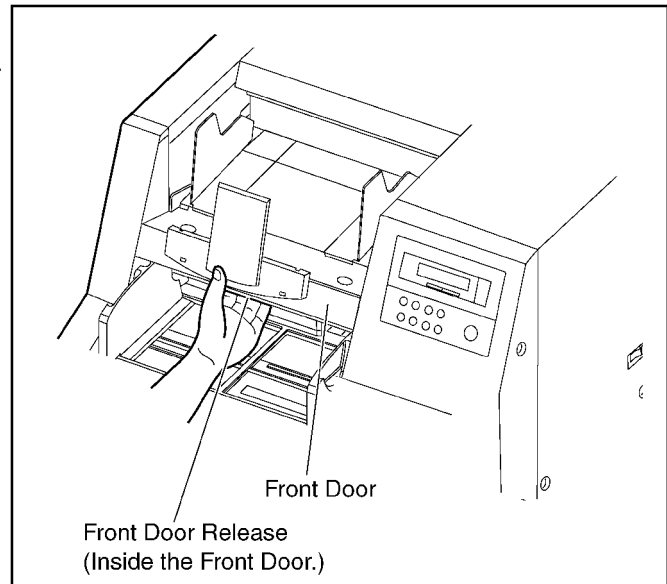
The information shown in the "Comments" column of the upper figure is used in the "Part Name & Description" column of Section 14.

7.2. Cleaning Rollers

- (1) Turn the power off.
- (2) Using your hand to pull the Front Door release towards you.

Note

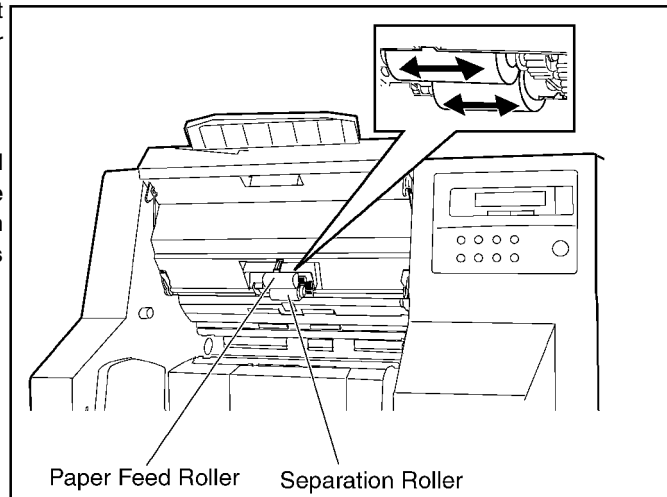
The Front Door now opens slowly.



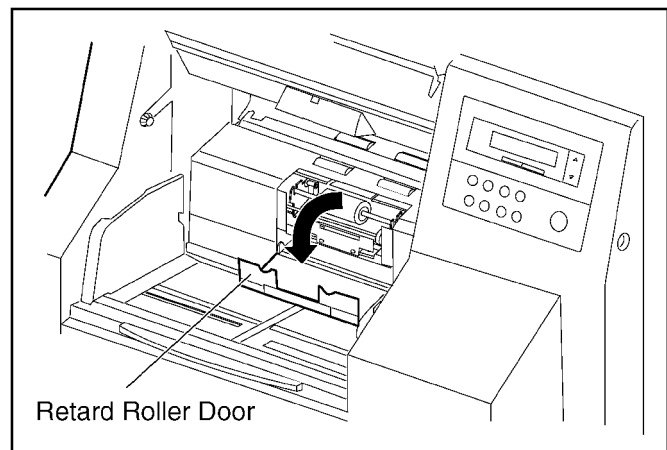
- (3) Use the accessory Roller Cleaning Paper to wipe off the dirt on the surfaces of the Paper Feed Roller, Separation Roller and Retard Roller.

Note

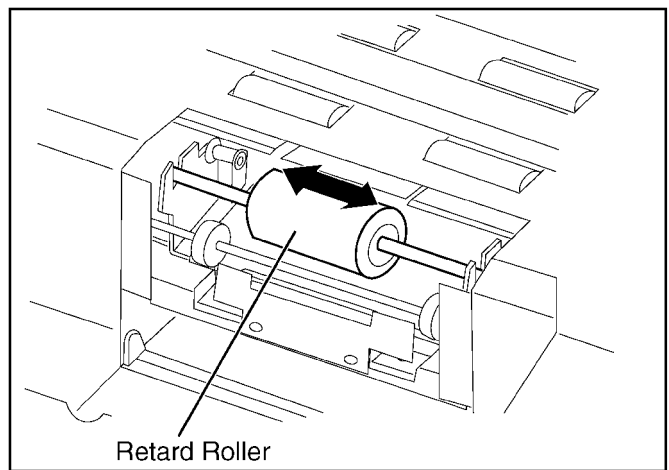
When wiping off the dirt on the roller surfaces, hold the rollers to prevent them from rotating, and wipe the rollers all the way around them proceeding from one end to the other in the directions of the arrows shown in the figure to the right.



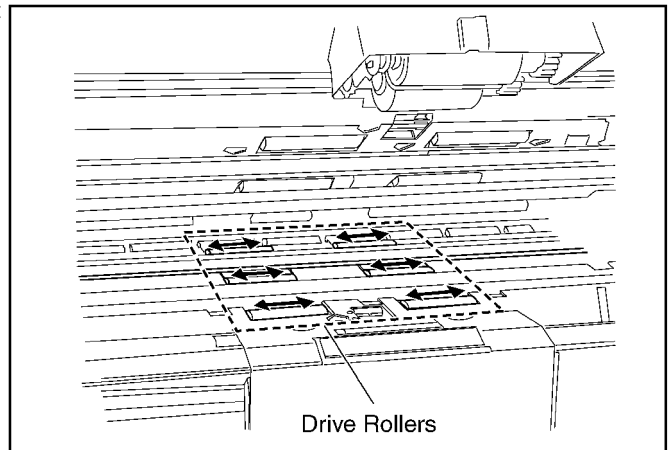
- (4) Open the Retard Roller Door.



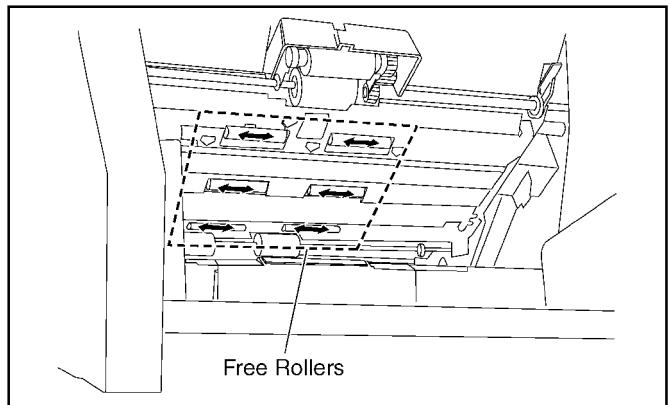
- (5) Use the accessory Roller Cleaning Paper to clean the surface of the Retard Roller. Wipe the Retard Roller all the way around it proceeding from one end to the other in the direction of the arrow shown in the figure to the right. Then close the Retard Roller Door.



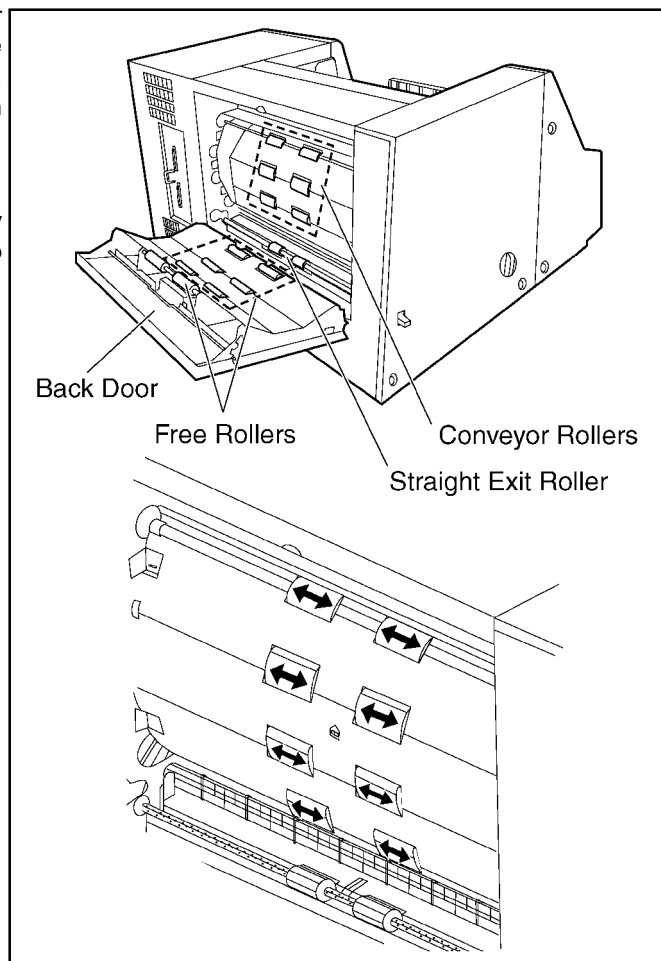
- (6) Use the accessory Roller Cleaning Paper to wipe off the dirt on the surfaces of the six rubber of the Drive Rollers.



- (7) Use the accessory Roller Cleaning Paper to clean the surface of six Free Rollers. Wipe all the way around them proceeding from one end to the other in the directions of the arrows shown in the figure to the right. Then close the Front Door.



- (8) After opening the Back Door by pulling the Back Door release, use the accessory Roller Cleaning Paper to wipe the surfaces of the Conveyor Rollers, Straight Exit Roller, and Free Rollers all the way around them proceeding from one end to the other in the directions of the arrows shown in the figure to the right. Then close the Back Door.
- (9) After cleaning, clear warning for "Clean Roller" on LCD by operating Clear warning for "Clean Roller" according to 9.5.4.2.



7.3. Cleaning the scanning section glass and reference plate

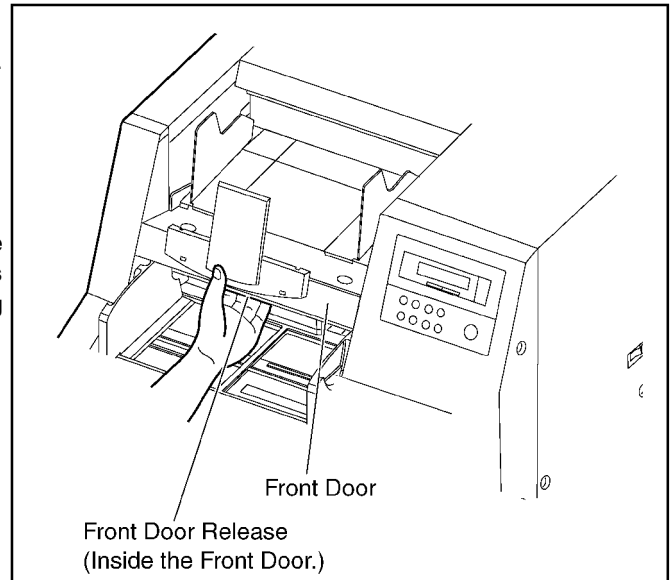
- (1) Turn the power off.
- (2) Using your hand, pull the Front Door Release towards you.

Note 1.

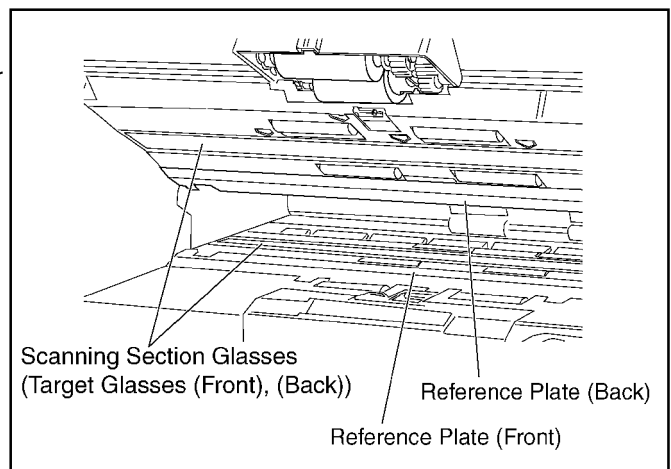
The Front Door now opens slowly.

Note 2.

After scanning operations, the surfaces around the scanning section glasses and the reference plates may be hot. Wait for them to cool before cleaning inside the scanner.



- (3) Clean the Scanning Section Glasses (Target Glasses (Front), (Back)) and Reference Plates (Reference Plate (Front), Reference Plate (Back)) using the accessory Roller Cleaning Paper.
- (4) Close the Front Door.

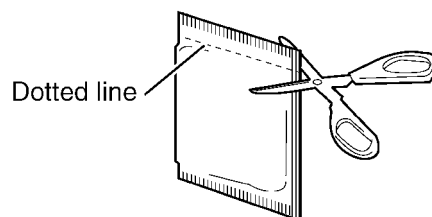


Note for the Roller Cleaning Paper

Open the bag by the dotted line and take out the Roller Cleaning Paper.

· If the bag is left open for a long period of time before using it, the alcohol will evaporate. Please use the Roller Cleaning Paper immediately after opening the bag.

The Roller Cleaning Paper (Model No. KV-SS03) is available via sales route.



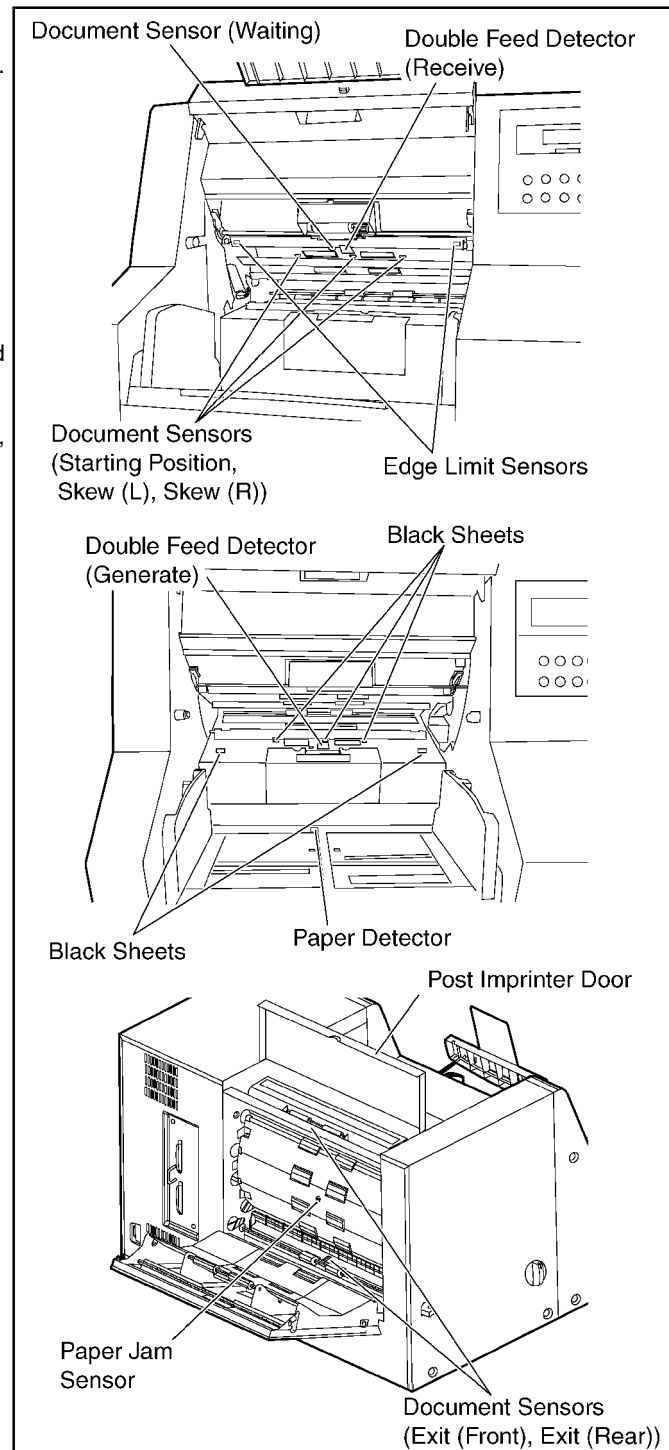
7.4. Cleaning Sensors

- (1) Turn the power off.
- (2) Using your hand, pull the Front Door Release towards you.

Note

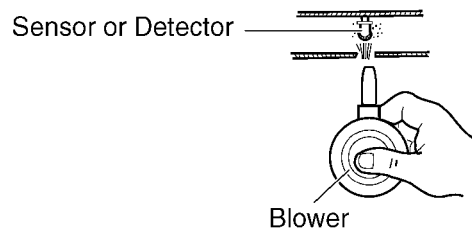
The Front Door now opens slowly.

- (3) Remove the dirt on the Document Sensors (Starting Position, Skew (L), Skew (R)), Edge Limit Sensors, Black Sheets, Double Feed Detectors ((Generate), (Receive)), and Paper Detector with the included blower.
- (4) Open the Back Door by pulling the Back Door Release, and open the Post Imprinter Door.
- (5) Also remove the dirt on the Document Sensors (Exit (Front), Exit (Rear)) and Paper Jam Sensor with included blower.



How to clean the Document Sensor, Double Feed Detector or Paper Detector.

Remove the brush and blow off the dirt through each hole of the sensors and detectors.



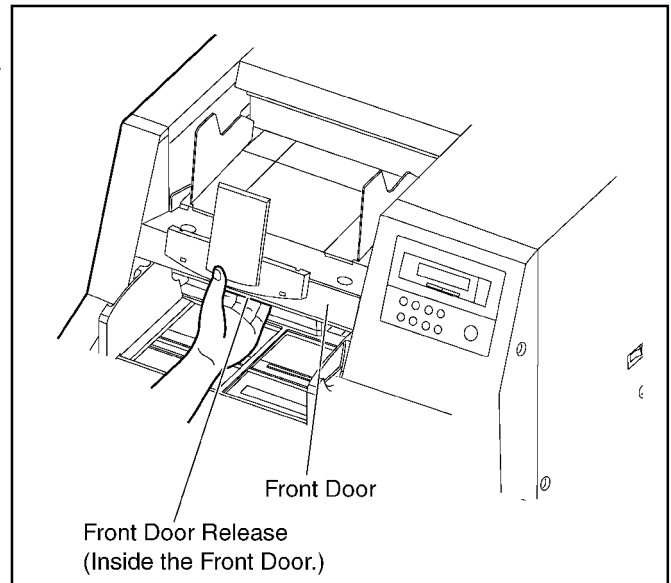
7.5. Replacing Limited Life Parts

7.5.1. Replacing the Paper Feed Roller Module

- (1) Turn the power off.
- (2) Using your hand, pull the Front Door Release towards you.

Note

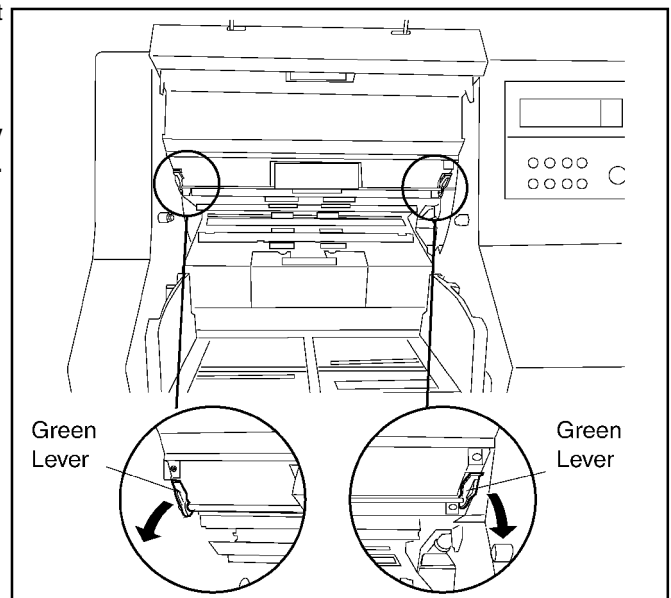
The Front Door now opens slowly.



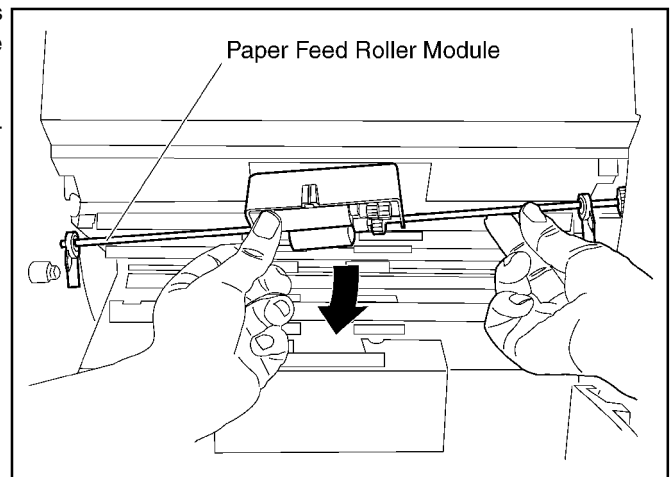
- (3) Use your fingers to push down the two Green Levers at both ends of the Paper Feed Roller Module.

Note

When moving the Green Levers, do not apply pressure in any other direction than the arrows. Otherwise, they may be broken.



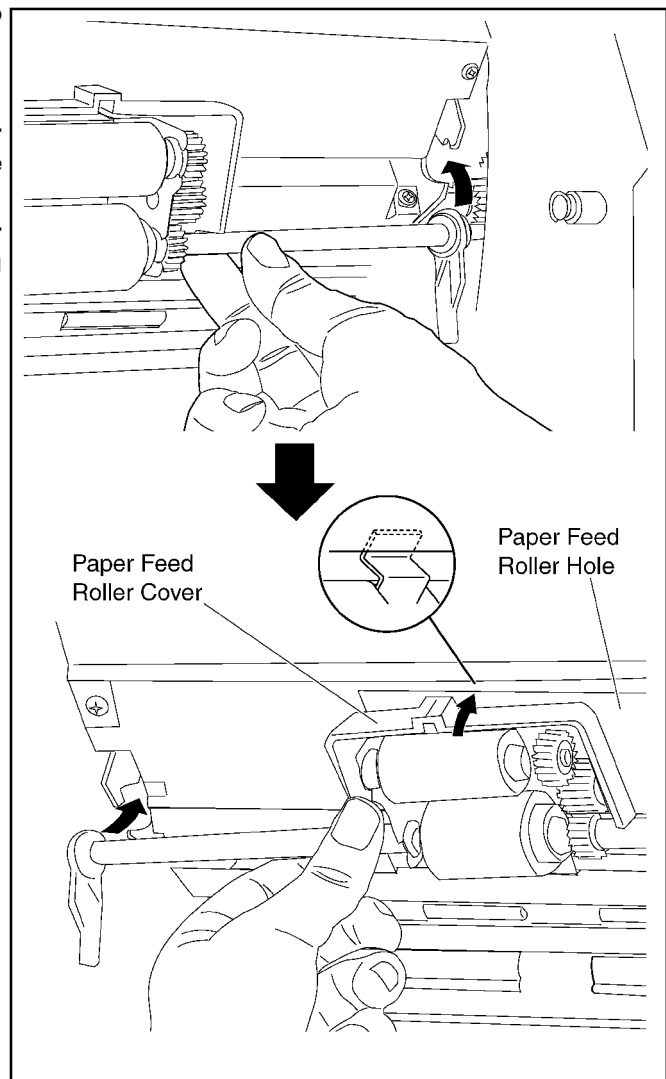
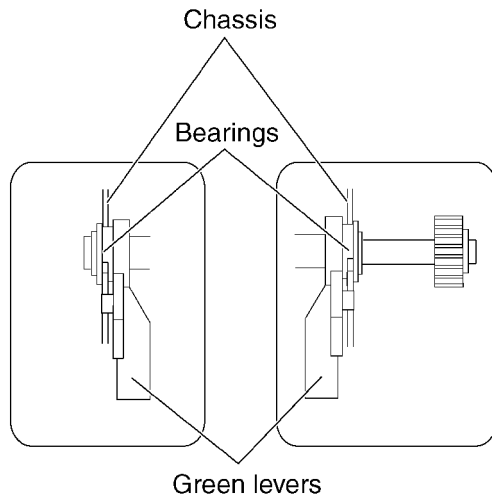
- (4) Remove the Paper Feed Roller Module by removing its bearing from the guide groove of the Chassis in the Scanner.
- (5) Open the optional "Roller Exchange Kit" (KV-SS026 or KV-SS027), and take out the Paper Feed Roller Module.



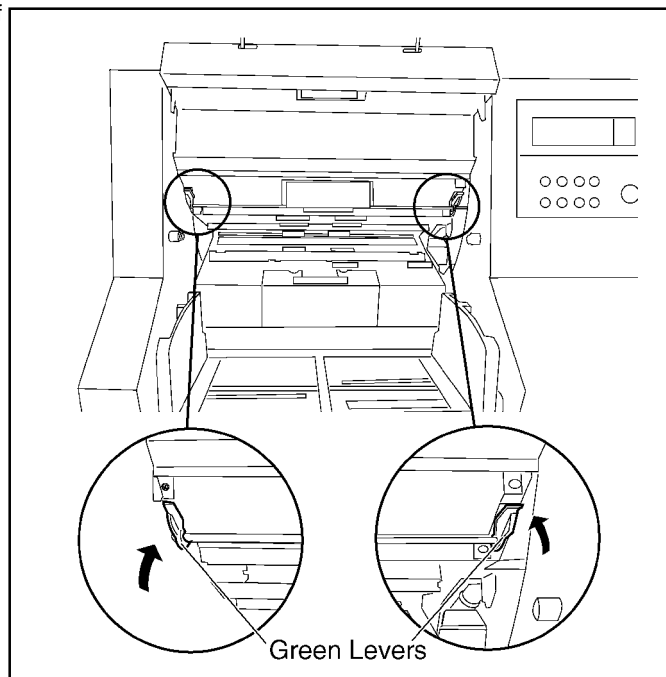
- (6) Install the new Paper Feed Roller Module with its gear to the right.

Note

- Attach the bearings at both ends of the Paper Feed Roller Module into the guide grooves of the chassis in the Scanner.
- Insert the Paper Feed Roller Cover into the Paper Feed Roller Hole before attaching the bearing into the grooves of the chassis.



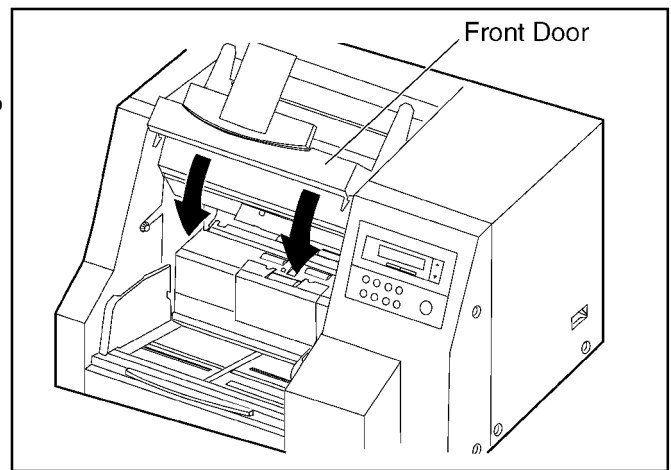
- (7) Push up the Green Levers at both ends in the direction of the arrow until they click into position.



- (8) Close the Front Door.

Note

Push the Front Door down slowly until it clicks into position.

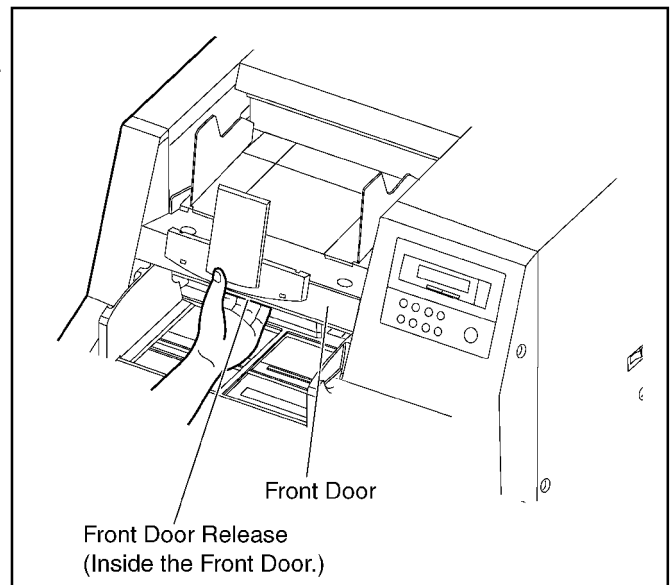


7.5.2. Replacing the Retard Roller Module

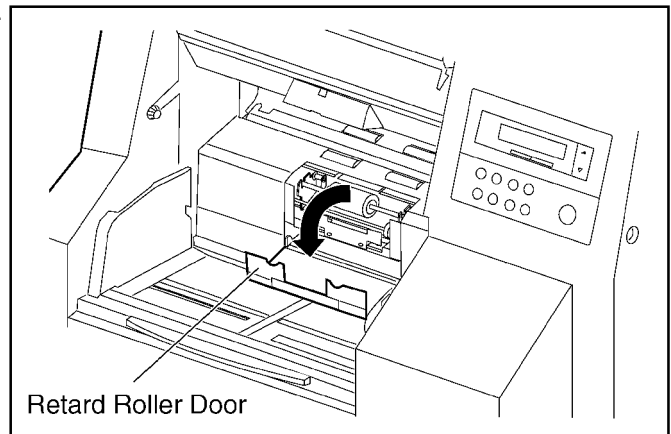
- (1) Turn the power off.
(2) Using your hand, pull the Front Door Release towards you.

Note

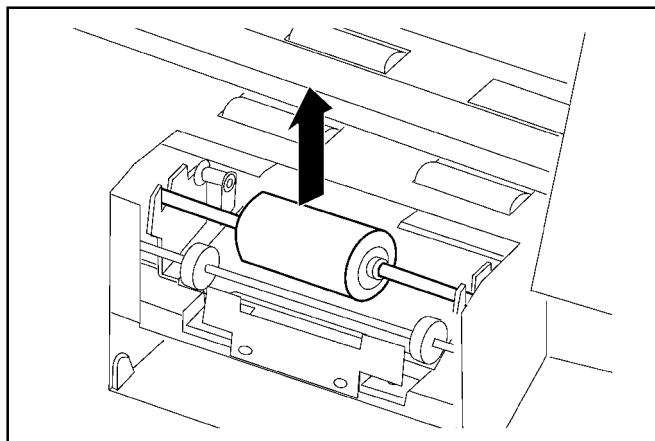
The Front Door now opens slowly.



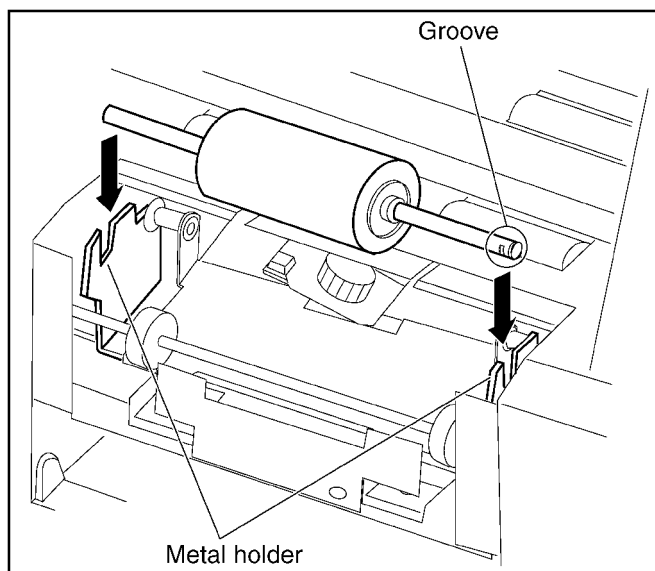
- (3) Use your fingers to pull the Retard Roller Door toward you.



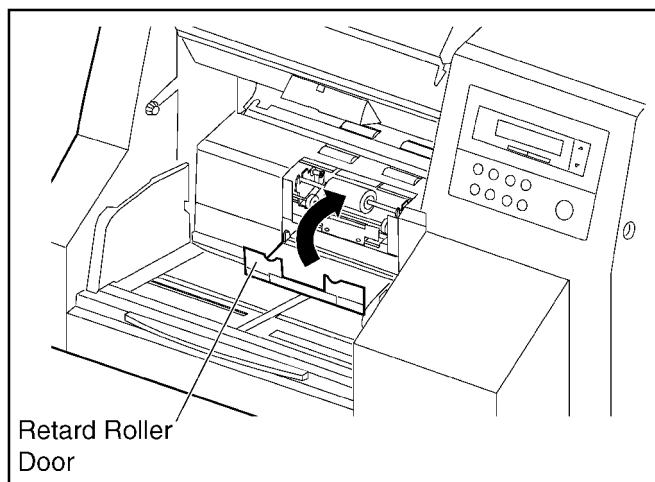
- (4) Use your fingers to pull up the Retard Roller Module in the direction of the arrow.
- (5) Take out the Retard Roller Module in the "Roller Exchange Kit (KV-SS026 or KV-SS027)".



- (6) Install the new Retard Roller Module with the groove of its shaft on the right and match it to the groove on the right side of the metal holder.



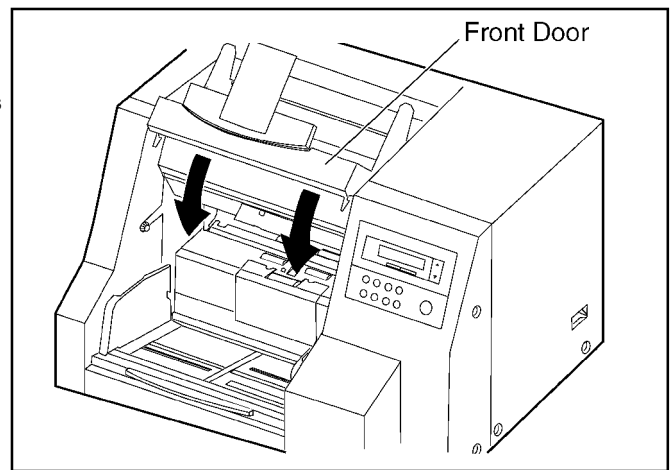
- (7) Close the Retard Roller Door.



- (8) Close the Front Door.

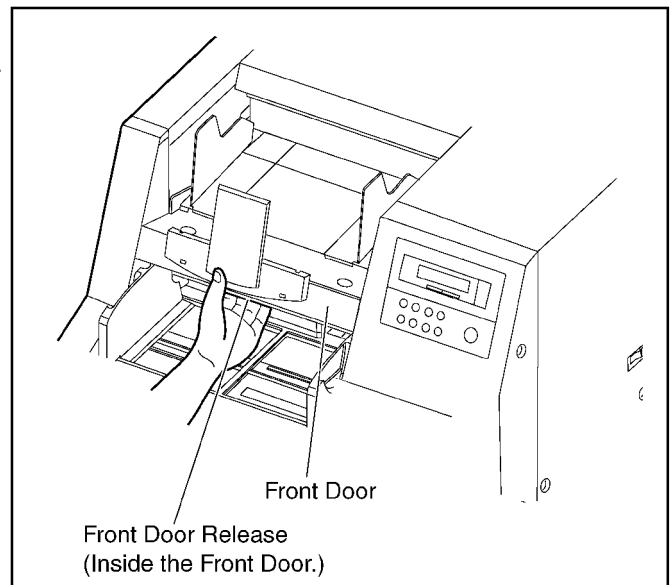
Note

- Push down the Front Door slowly until it clicks into place.

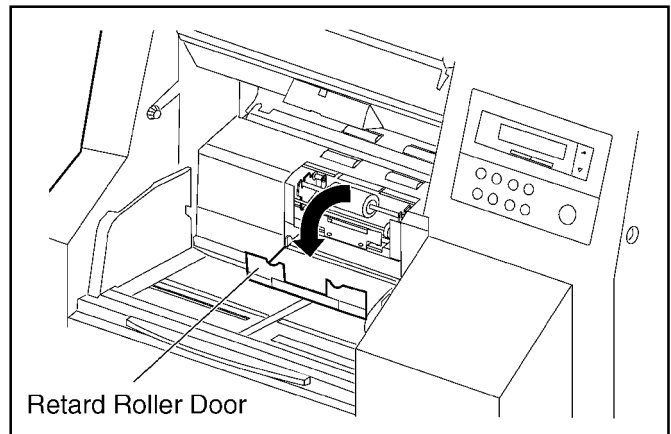


7.5.3. Replacing the Retard Pad

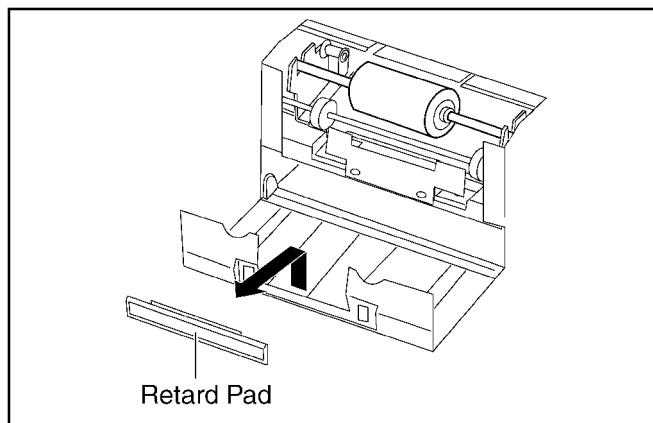
- (1) Turn the power off.
- (2) Using your hand, pull the Front Door Release towards you.
 - **The Front Door now opens slowly.**



- (3) Using your fingers, open the Retard Roller Door.

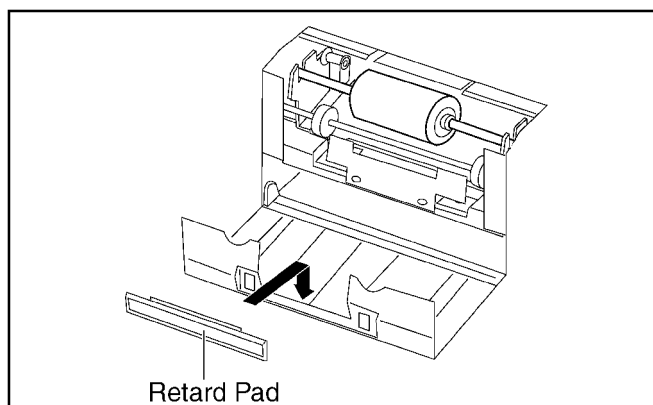


- (4) Pull and remove the Retard Pad in the direction of the arrow.

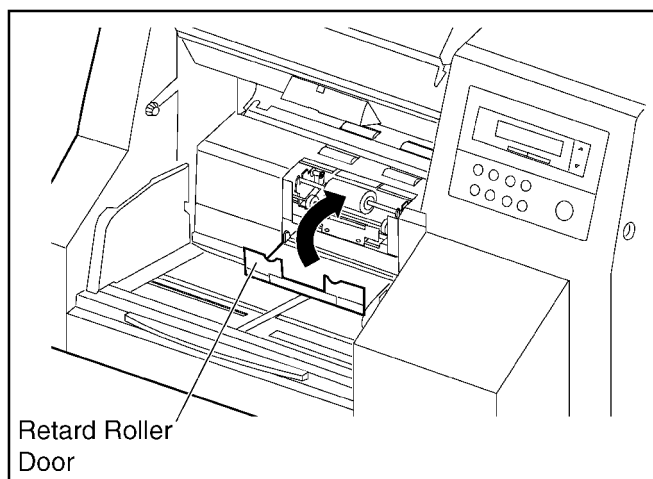


- (5) Open the "Roller Exchange Kit" (KV-SS026 or KV-SS027), and take out the new Retard Pad.

- (6) Install the new Retard Pad in the direction of the arrow until it is locked.



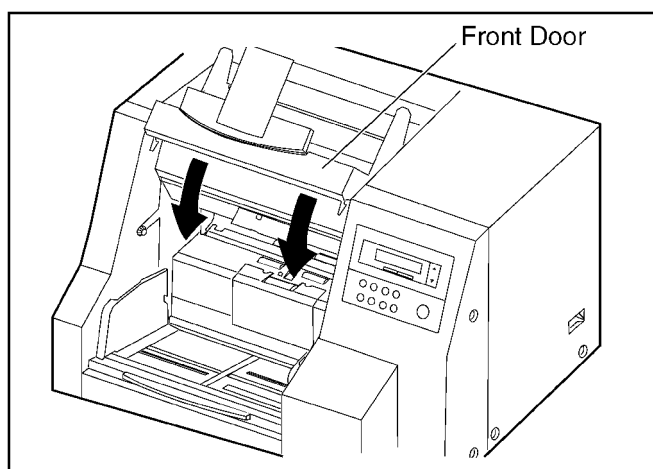
- (7) Close the Retard Roller Door.



- (8) Close the Front Door.

Note

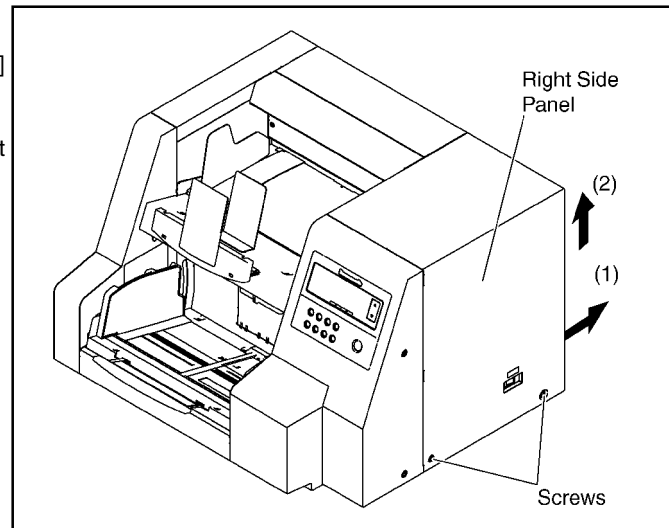
- Push down the Front Door slowly until it clicks into place.
- After replacing the Paper Feed Roller Module, the Retard Roller Module, and the Retard Pad, clear warning for "Replace Roller", according to 9.5.4.2.



8.2. Exterior

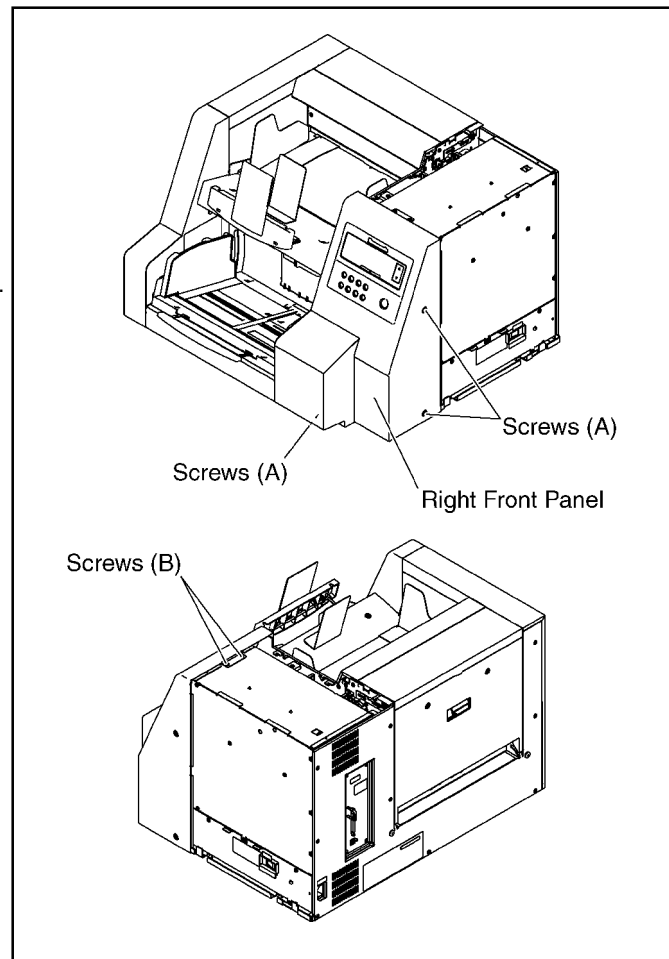
8.2.1. Right Side Panel

- (1) Remove the 2 screws.
- (2) Slide the Right Side Panel to backward [approx. 1cm (0.5")]
in the direction of the arrow (1).
- (3) Lift in the direction of the arrow (2) and remove the Right
Side Panel.



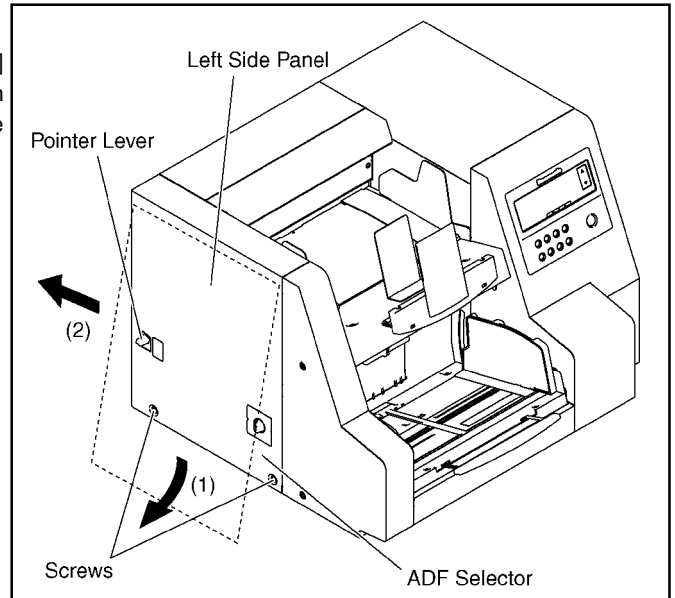
8.2.2. Right Front Panel

- (1) Turn on the power and press "**Hopper 1**" key to set the
hopper to 1,000 page setting position. And turn off the
power.
- (2) Remove the Right Side Panel. (See 8.2.1)
- (3) Remove the 3 screws (A) and 2 screws (B).
- (4) Pull the Right Front Panel toward the front of the unit.
- (5) Disconnect the CN6000 and remove the Right Front Panel.



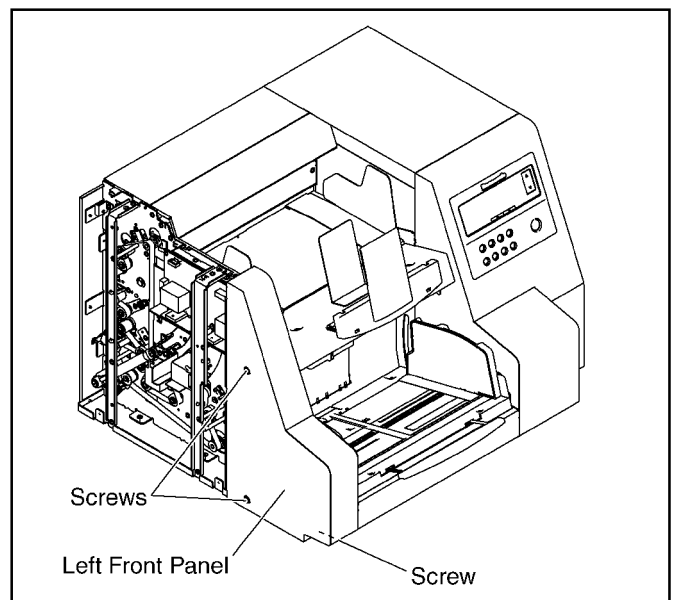
8.2.3. Left Side Panel

- (1) Remove the 2 screws.
- (2) Slide the Left Side Panel to backward [approx. 1cm (0.5")]
(in the direction of the arrow (2)), while bending the panel in
the direction of the arrow (1)) to avoid contacting to the
Pointer Lever.
- (3) Lift and remove the Left Side Panel.



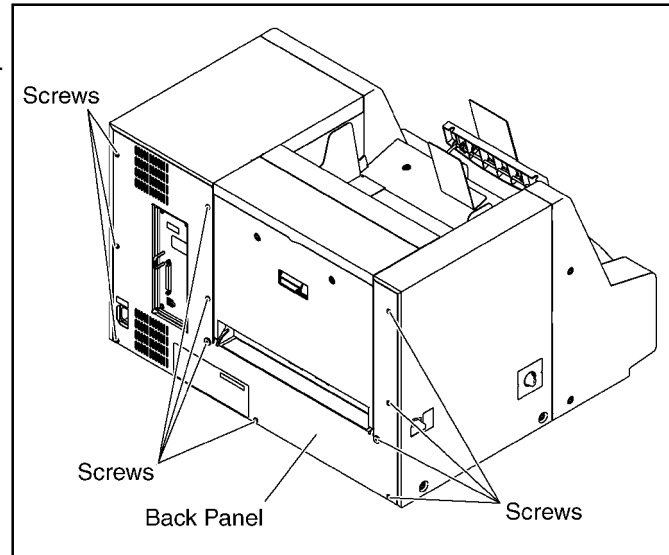
8.2.4. Left Front Panel

- (1) Turn on the power and press "**Hopper 1**" key to set the
hopper to 1,000 page setting position. And turn off the
power.
- (2) Remove the Left Side Panel. (See 8.2.3)
- (3) Remove the 3 screws.
- (4) Slide the Left Front Panel toward the front of the unit to
remove.



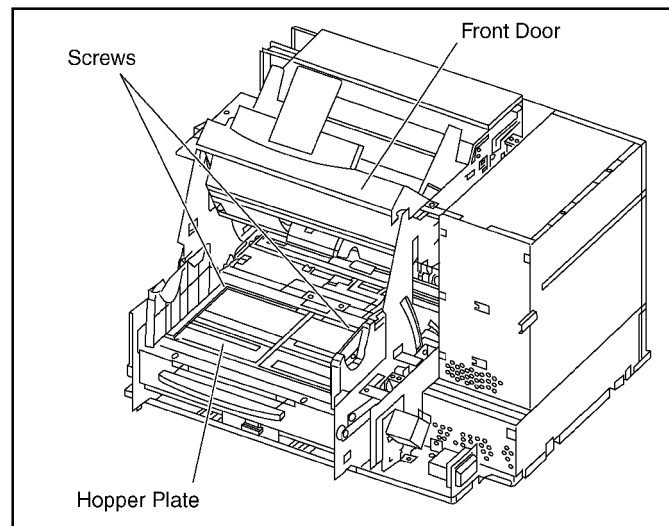
8.2.5. Back Panel

- (1) Remove the 11 screws.
- (2) Pull the Back Panel toward the back of the unit to remove.



8.2.6. Hopper Plate

- (1) Turn on the power and press "**Hopper 3**" key to set the hopper to 1 page setting position.
- (2) Turn off the power.
- (3) Open the Front Door.
- (4) Remove the 2 screws.

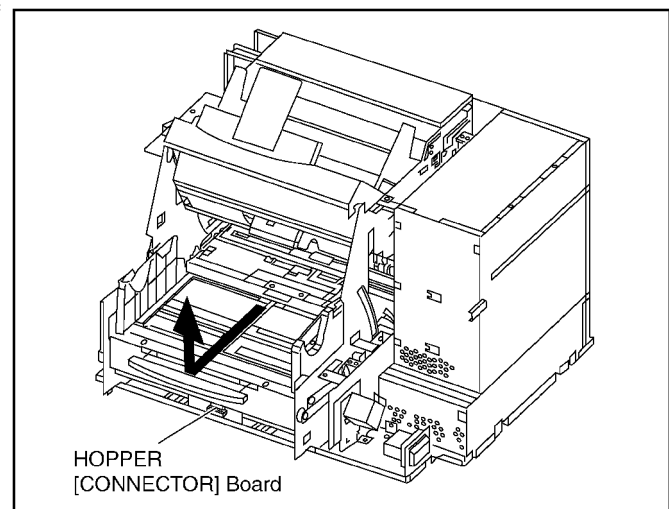


- (5) Pull the front side of the Hopper Plate towards the front of the unit.

Note

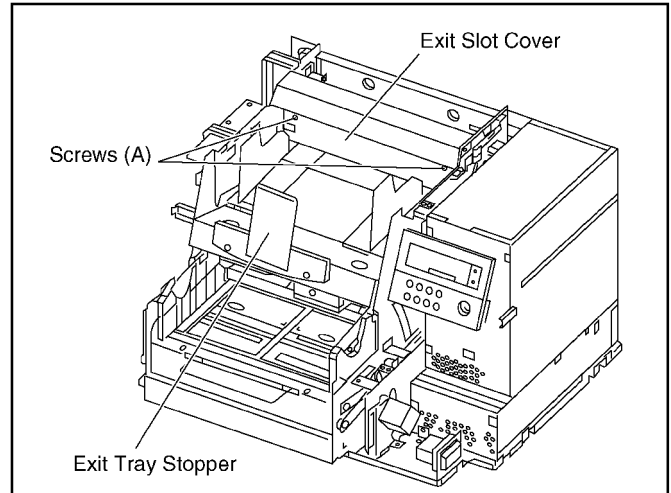
When removing the Hopper Plate, be careful not to tear the flexible cable attached to the plate.

- (6) Disconnect the CN6003 on the HOPPER [CONNECTOR] Board to remove the Hopper Plate.

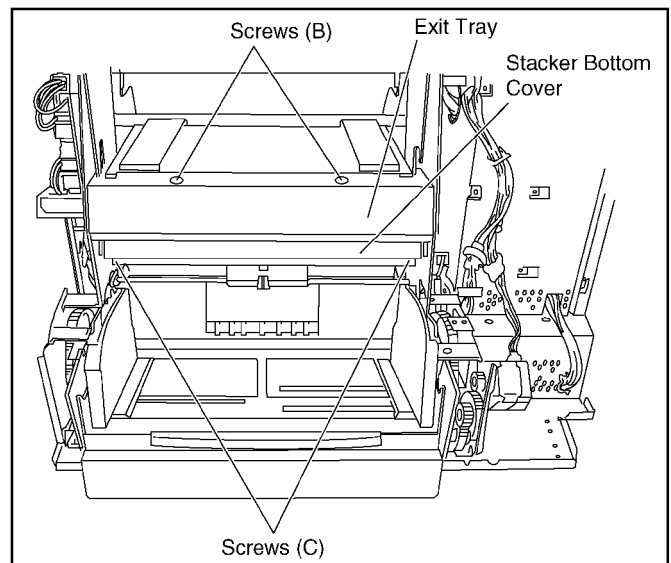


8.2.7. Exit Slot Cover, Stacker Bottom Cover

- (1) Remove the 2 screws (A) and remove the Exit Slot Cover.
- (2) Pull the Exit Tray Stopper toward the front of the unit to remove it.

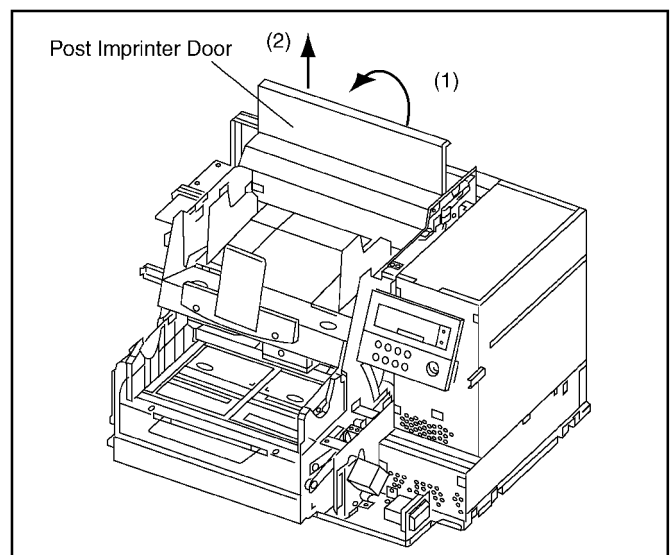


- (3) Remove the 2 screws (B).
- (4) Pull the Exit Tray to the front of the unit and lift to remove.
- (5) Open the Front Door and remove the 2 screws (C).
- (6) Remove the Stacker Bottom Cover.



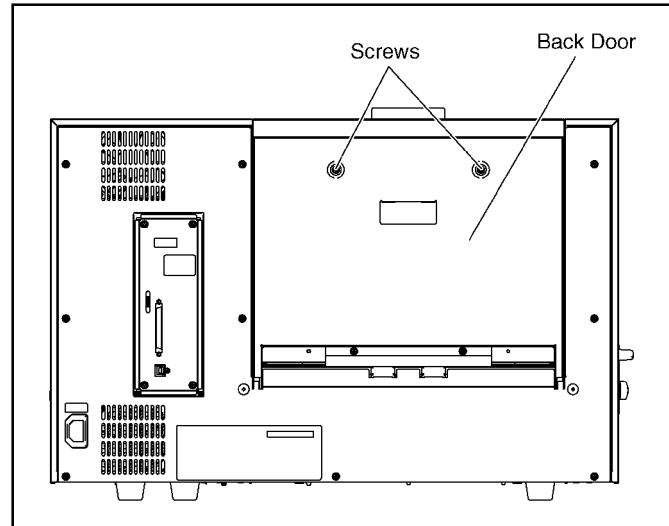
8.2.8. Post Imprinter Door

- (1) Open the Post Imprinter Door.
- (2) Lift up the Post Imprinter Door to remove.

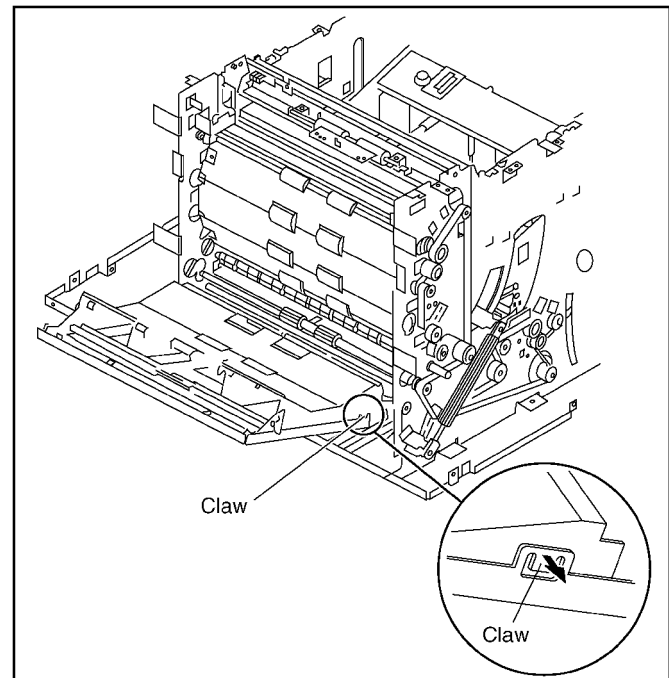


8.2.9. Back Door Cover

- (1) Remove the 2 screws.



- (2) Spread the 2 claws of right-and-left both sides toward the outside.



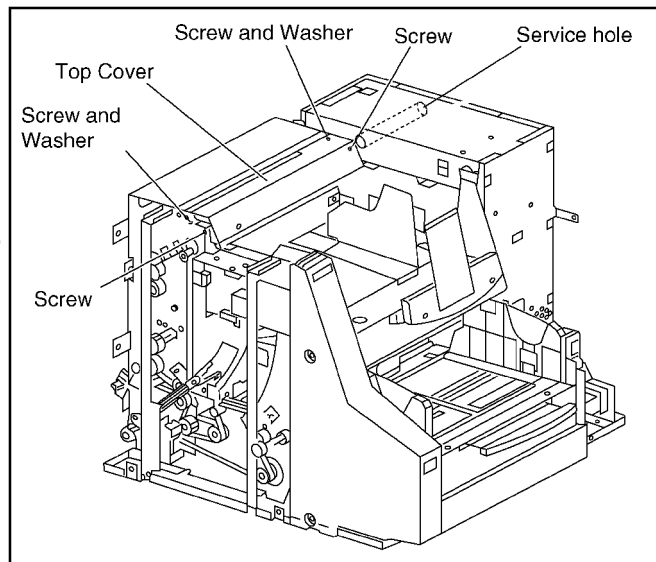
8.2.10. Top Cover

- (1) Remove Right Side Panel. (See 8.2.1)
- (2) Remove Left Side Panel. (See 8.2.3)
- (3) Remove the 4 screws and 2 washers.

Note

- Be careful not to drop washer inside of the unit.
- When removing a right side screw, insert a driver from the service hole on Board Box and remove it.

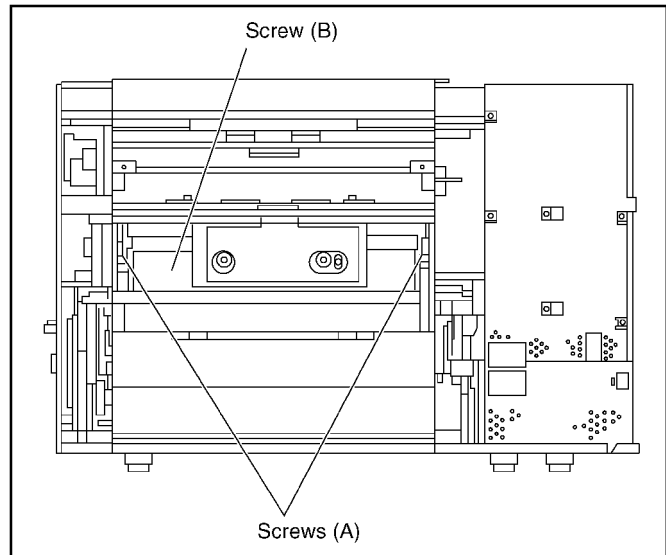
- (4) Remove the Top Cover.



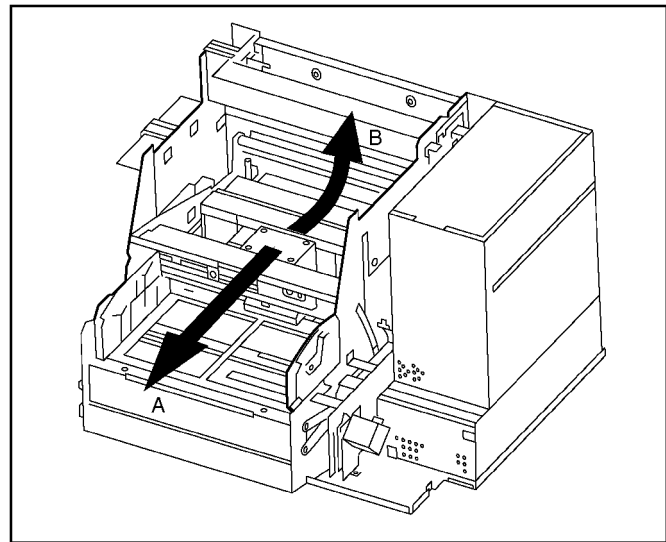
8.3. Unit Components

8.3.1. Front Side Optical Unit

- (1) Remove the Exit Slot Cover, and Stacker Bottom Cover. (See 8.2.7)
- (2) Disconnect all connectors.
- (3) Remove the 2 screws (A).
- (4) Remove the screw (B) for the clamper fixing shield cable.

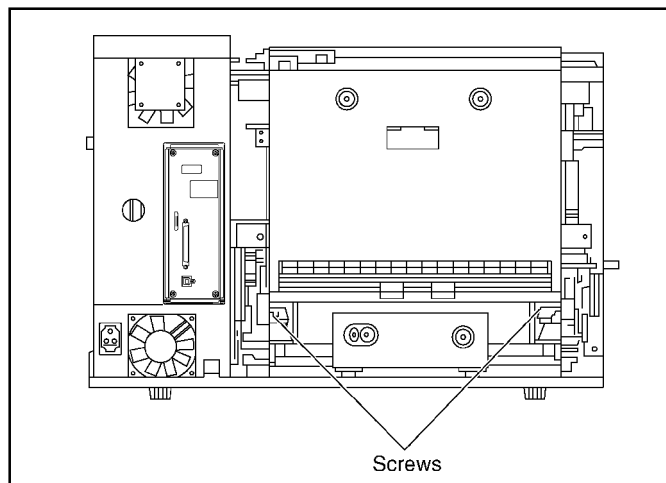


- (5) Pull the Front Side Optical Unit slightly toward the front of the unit (Arrow A) and lift the back to remove it (Arrow B).



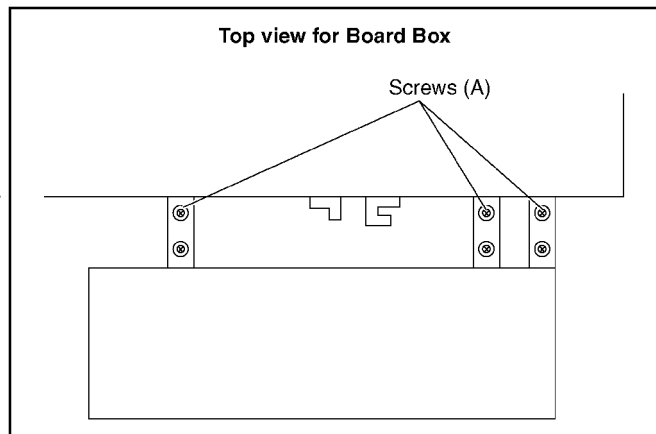
8.3.2. Back Side Optical Unit

- (1) Remove the Back Panel. (See 8.2.5)
- (2) Disconnect all connectors.
- (3) Remove the 2 screws.
- (4) Pull the Back Side Optical Unit toward the back of the unit to remove.

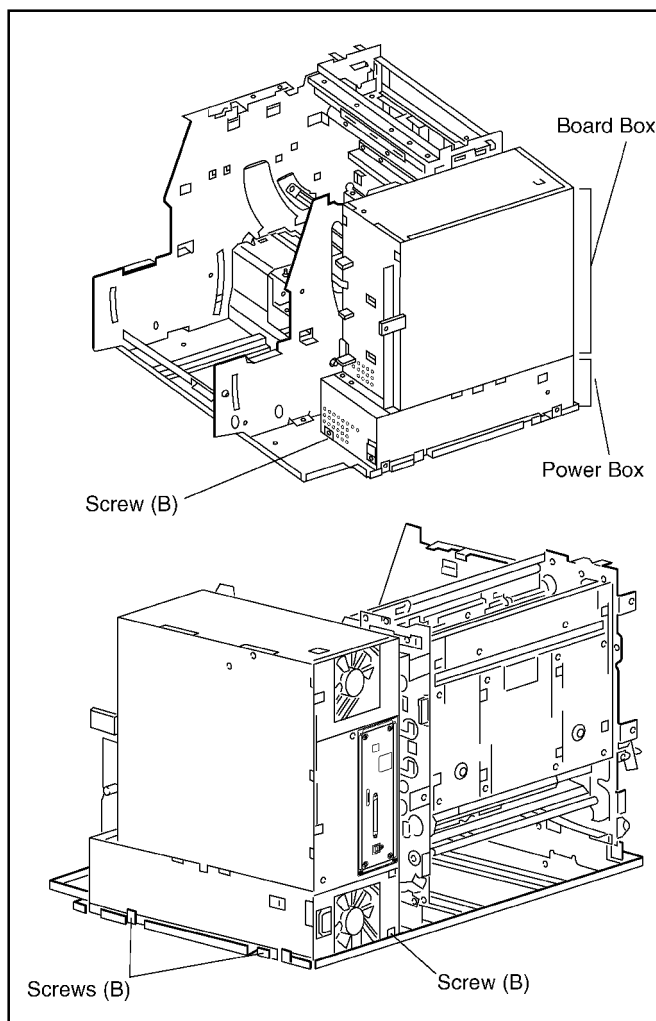


8.3.3. Board Box & Power Box

- (1) Remove the Right Front Panel. (See 8.2.2)
- (2) Remove CONTROL, INTERFACE, and DRIVE Boards. (See 8.4.2 - 8.4.4)
- (3) Disconnect all connectors on the MOTHER Board.
- (4) Remove the connectors clamped on the Board box & Power Box.
- (5) Remove the 3 screws (A).

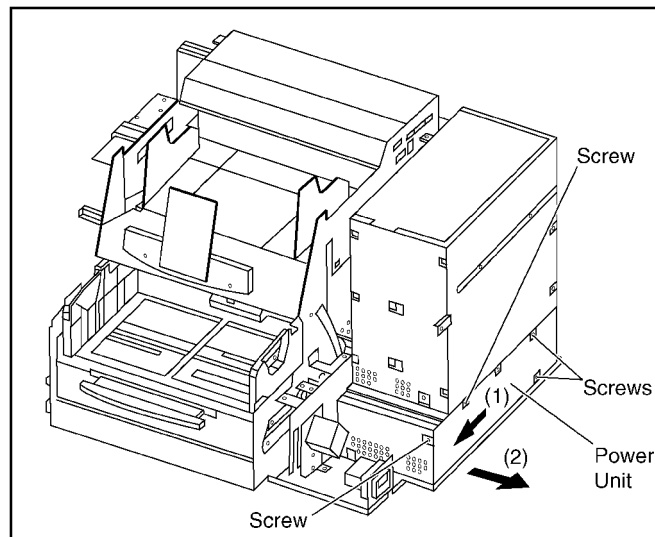


- (6) Remove the 4 screws (B) and remove the Board Box & Power Box.



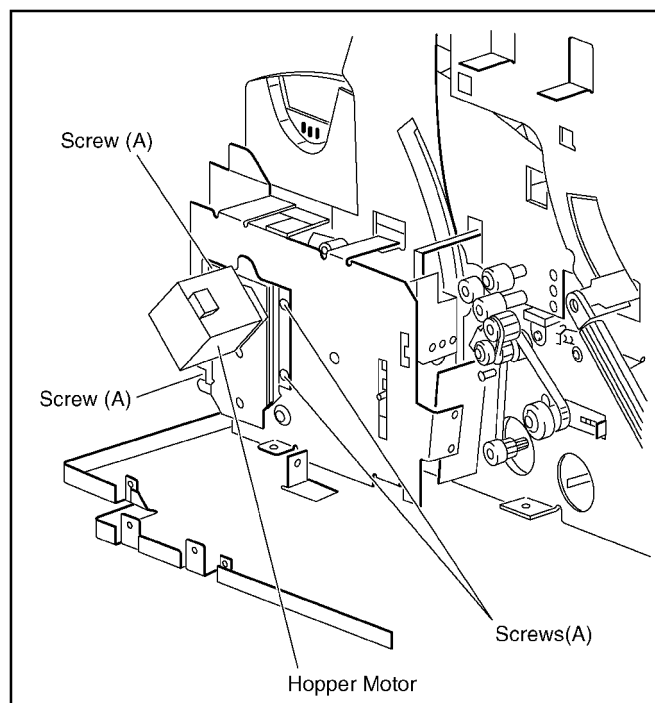
8.3.4. Power Unit

- (1) Remove the Right Front Panel. (See 8.2.2)
- (2) Remove the 4 screws.
- (3) Slide the Power Unit in the direction of the arrow (1), and pull out it in the direction of the arrow (2).
- (4) Disconnect CN2, CN3 on the Power Board.

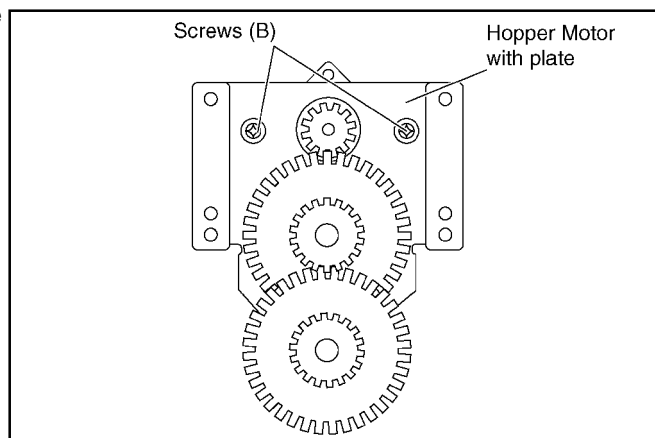


8.3.5. Hopper Motor

- (1) Remove the Right Front Panel. (See 8.2.2)
- (2) Disconnect the Hopper Motor Cable.
- (3) Remove the 4 screws (A) and remove the Hopper Motor with plate.

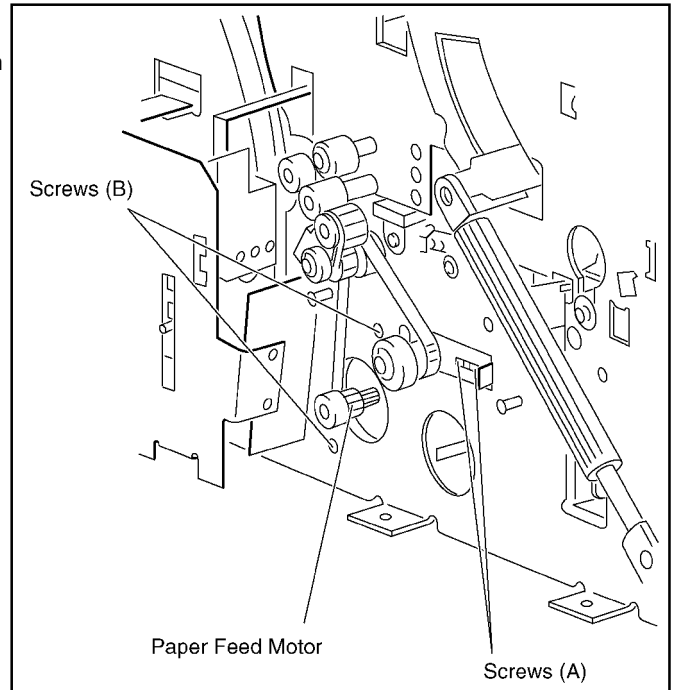


- (4) Remove the 2 screws (B) from the Hopper Motor with plate to remove the Hopper Motor.



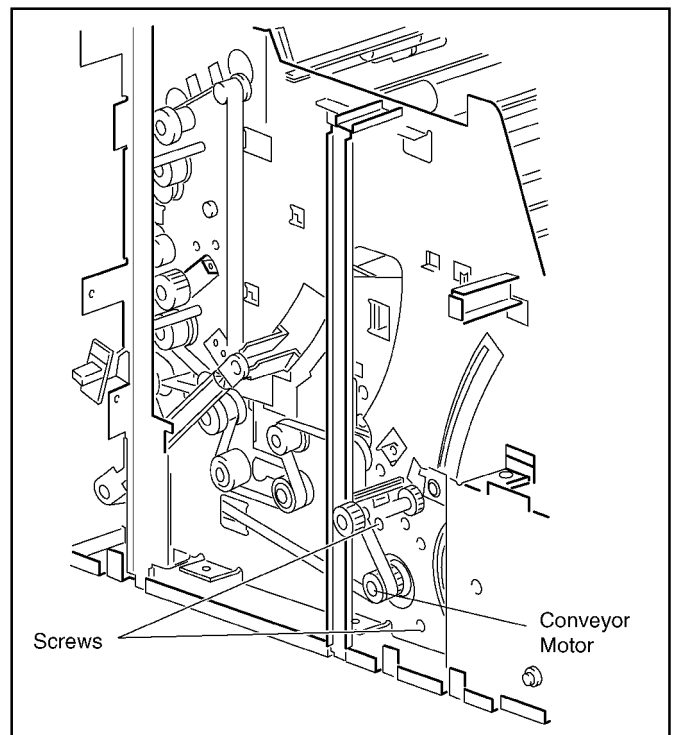
8.3.6. Paper Feed Motor

- (1) Remove the Board Box & Power Box. (See 8.3.3)
- (2) Loosen the 2 screws (A) on the Paper Feed Motor Tension Pulley.
- (3) Remove the Back Side Optical Unit (See 8.3.2)
- (4) Remove the 2 screws (B).
- (5) Disconnect the Paper Feed Motor Cable.
- (6) Remove the Paper Feed Motor.



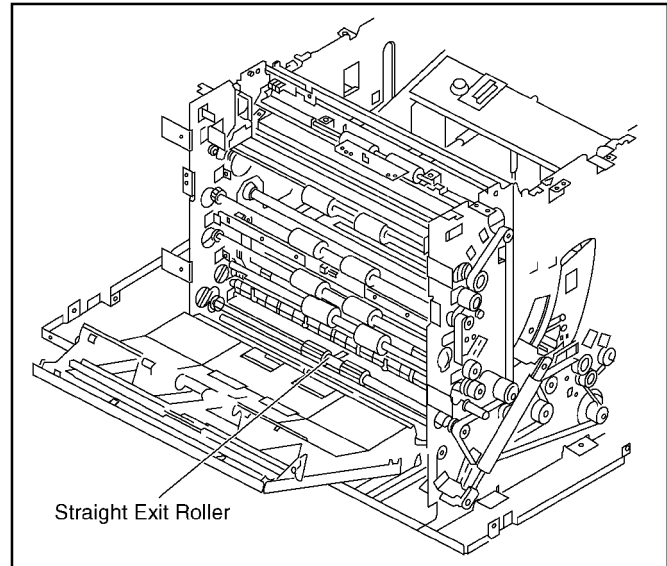
8.3.7. Conveyor Motor

- (1) Remove the Conveyor Belt 2. (See 8.3.12)
- (2) Remove the Back Side Optical Unit (See 8.3.2)
- (3) Remove the 2 screws.
- (4) Disconnect the Conveyor Motor Cable.
- (5) Remove the Conveyor Motor.



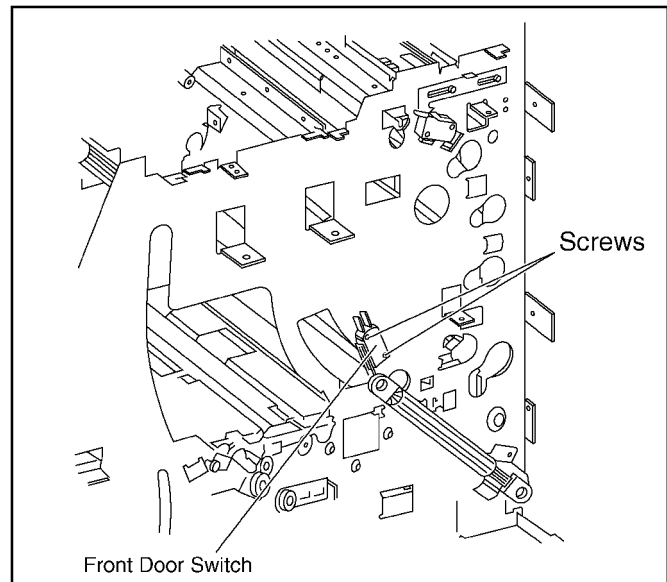
8.3.8. Straight Exit Roller

- (1) Remove the Conveyor Belt 2. (See 8.3.12)
- (2) Open the Back Door.
- (3) Unhook the Straight Exit Roller from the notching hole of chassis and remove it.



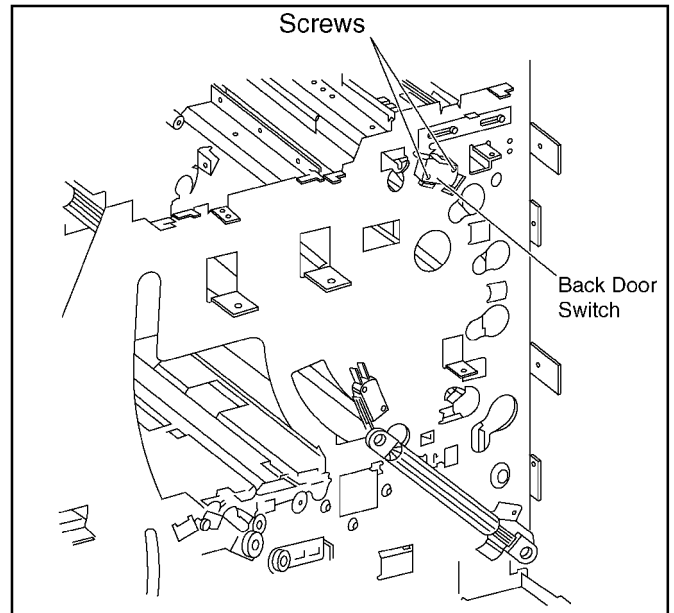
8.3.9. Front Door Switch

- (1) Remove the Board Box & Power Box. (See 8.3.3)
- (2) Disconnect the Front Door Switch Cable.
- (3) Remove the 2 screws.



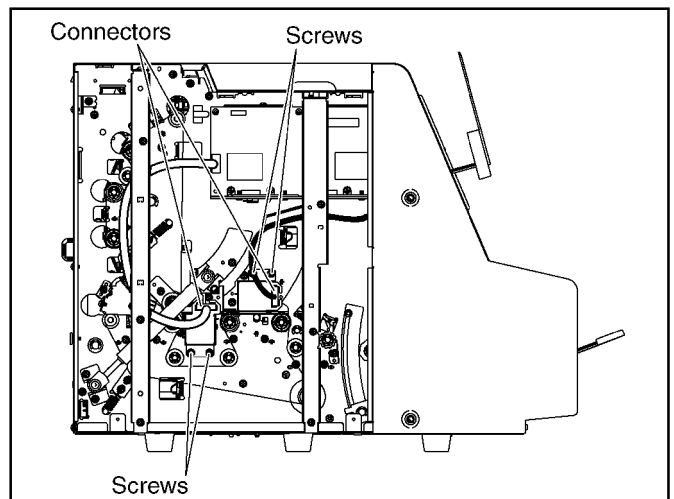
8.3.10. Back Door Switch

- (1) Remove the Board Box & Power Box. (See 8.3.3)
- (2) Disconnect the Back Door Switch Cable.
- (3) Remove the 2 screws.

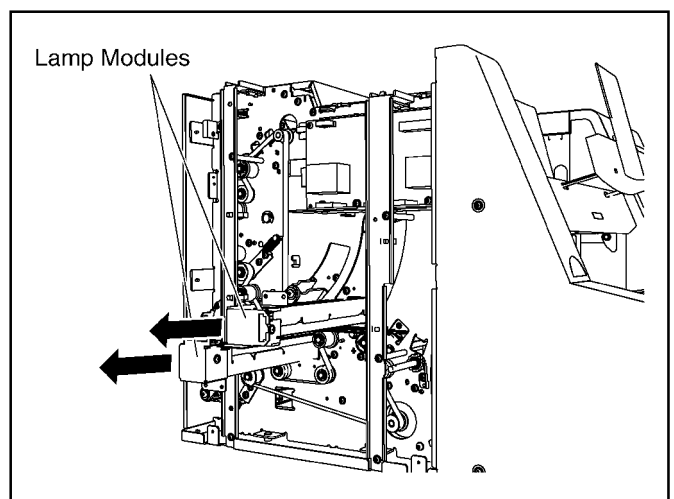


8.3.11. Lamps [Front], [Back]

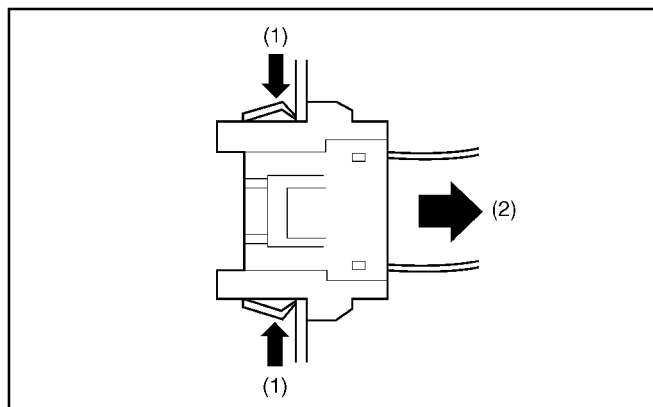
- (1) Remove the Left Side Panel. (See 8.2.3.)
- (2) Remove the 4 screws and 2 connectors from each Lamp.



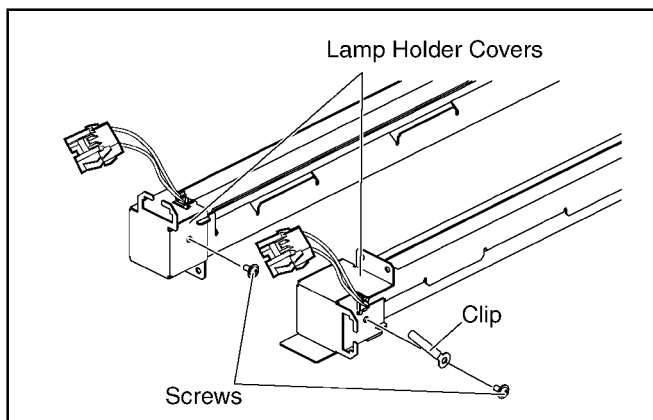
- (3) Pull the Lamp Modules out of the Scanner.



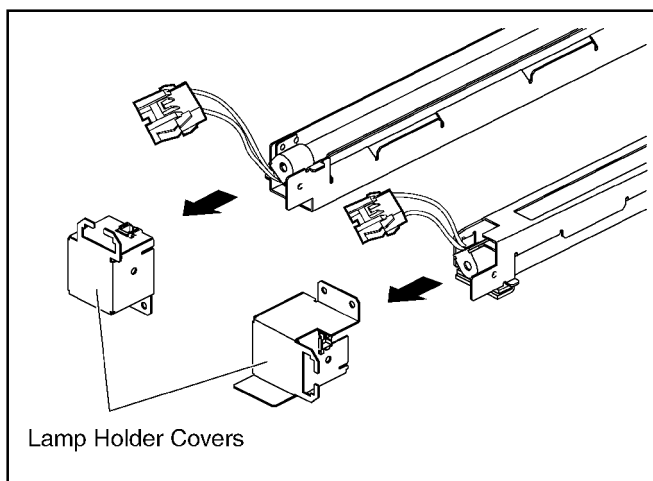
- (4) While squeezing the connector locks (1), remove the lamp cable connector (2) from the connector holder.



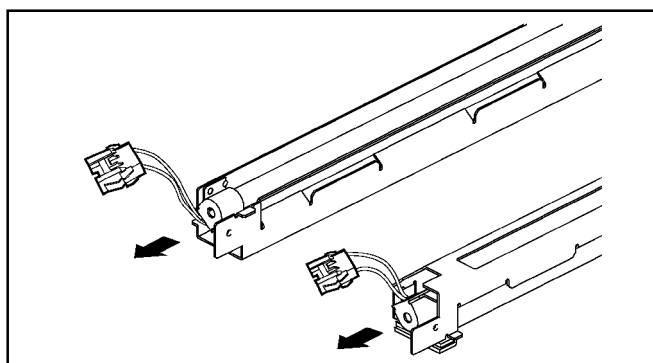
- (5) Remove the screws that fix the Lamp Holder Covers after releasing the clip.



- (6) Remove the Lamp Holder Covers on the Lamp Modules.



- (7) Remove the Lamps from the Lamp Modules in the direction of the arrows.



8.3.12. Conveyor Belt 2

- (1) Remove the Left Side Panel. (See 8.2.3)
- (2) Loosen the 2 screws (A) and release the Tension Pulley.
- (3) Remove the 2 screws (B) and remove the Gear-pulley.
- (4) Remove the 3 screws (C) and remove the Side Panel Stay 2.
- (5) Remove the Conveyor Belt 2.

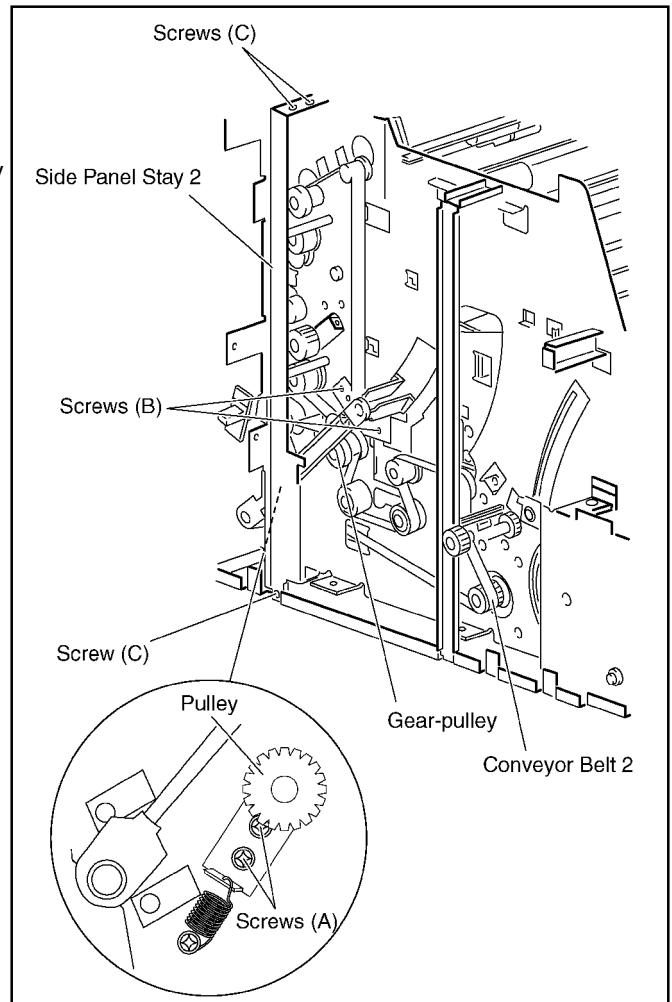
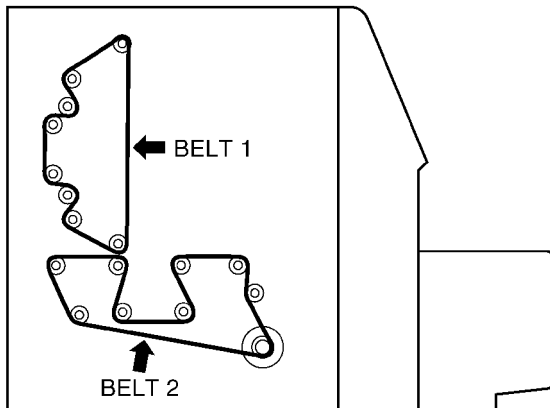
Reassembling Note

Adjust belt tension according to the following instruction.

BELT LAYOUT

Tension of the belt:

Adjust the belt tension having about 5 mm (0.2 in.) bent by pressing the arrow points with 5 N.



8.3.13. Conveyor Belt 1

- (1) Remove the Left Side Panel. (See 8.2.3)
- (2) Remove the 3 screws (C) and remove the Side Panel Stay 2.
- (3) Remove the 2 screws (A).
- (4) Remove the Gear-Pulley
- (5) Loosen the 2 screws (B) and release the Tension Pulley.
- (6) Remove the Conveyor Belt 1.

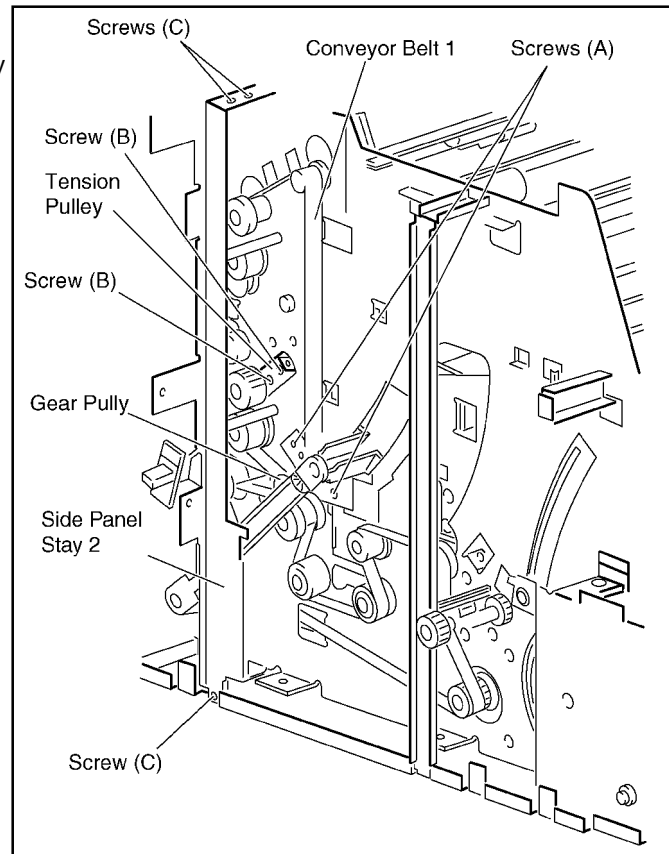
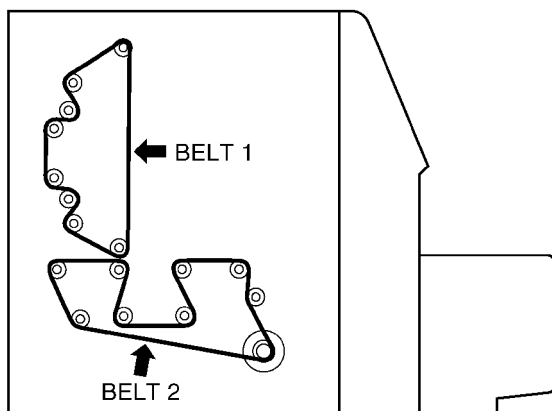
Reassembling Note

Adjust belt tension according to the following instruction.

BELT LAYOUT

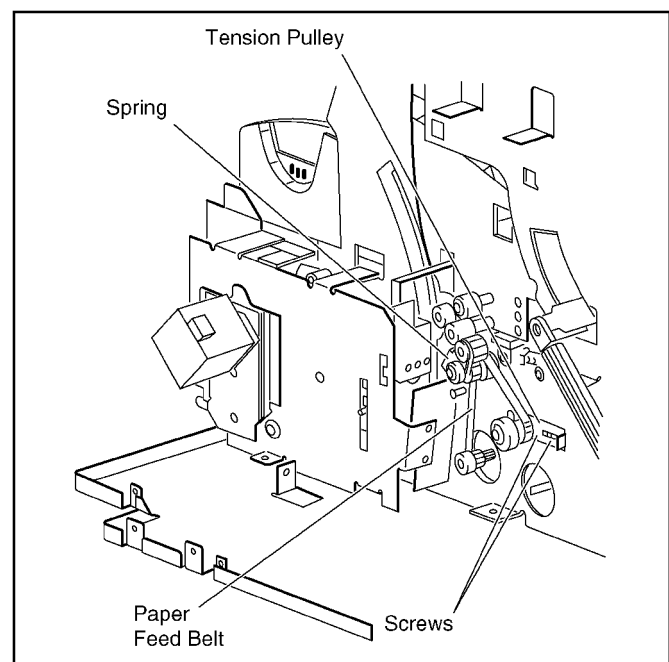
Tension of the belt:

Adjust the belt tension having about 5 mm (0.2 in.) bent by pressing the arrow points with 5 N.



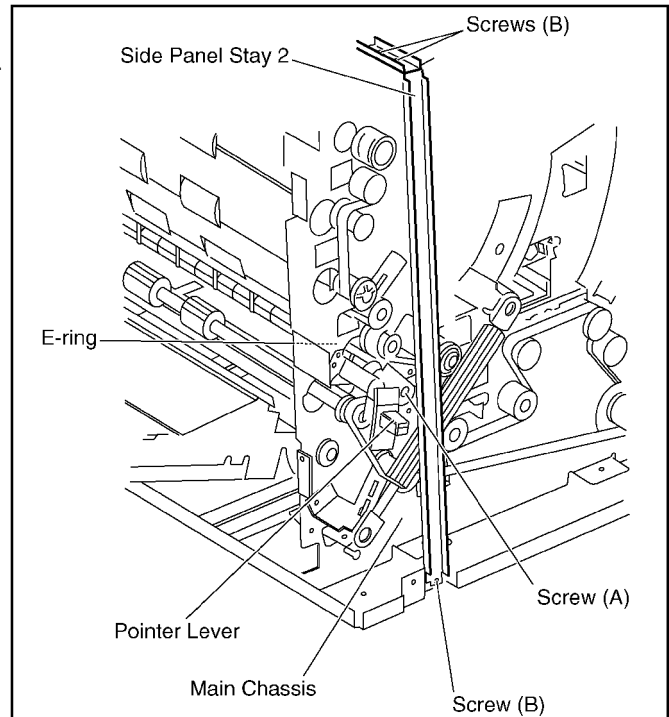
8.3.14. Paper Feed Belt

- (1) Remove the Right Front Panel. (See 8.2.2)
- (2) Remove the Board Box & Power Box. (See 8.3.3)
- (3) Loosen the 2 screws and release the Tension Pulley.
- (4) Remove the Spring.
- (5) Remove the Paper Feed Belt.



8.3.15. Pointer

- (1) Remove the Left Side Panel. (See 8.2.3)
- (2) Remove the 3 screws (B) to remove the Side Panel Stay 2.
- (3) Remove the screw (A) of the Pointer Shaft.

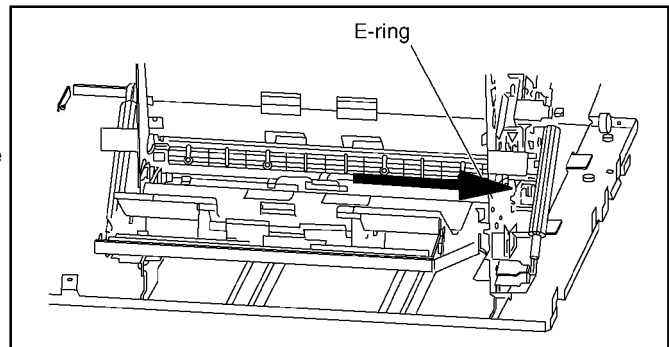


- (4) Remove the E-ring in the right of the Pointer Shaft.

Note

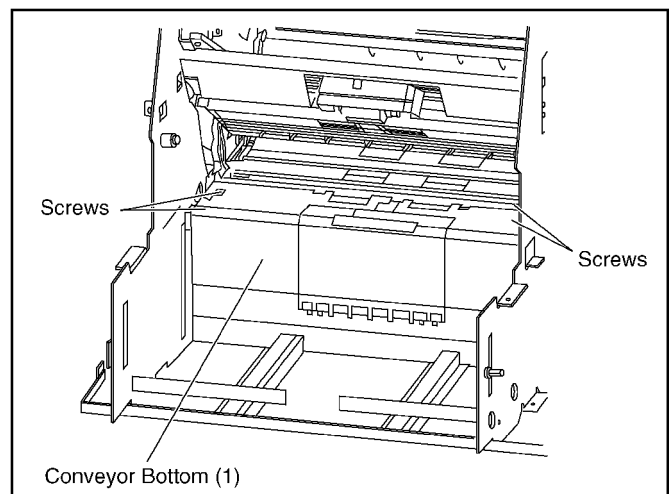
The E-ring is inside of the Main Chassis.

- (5) Pull out the Pointer in the direction of the arrow and remove it.

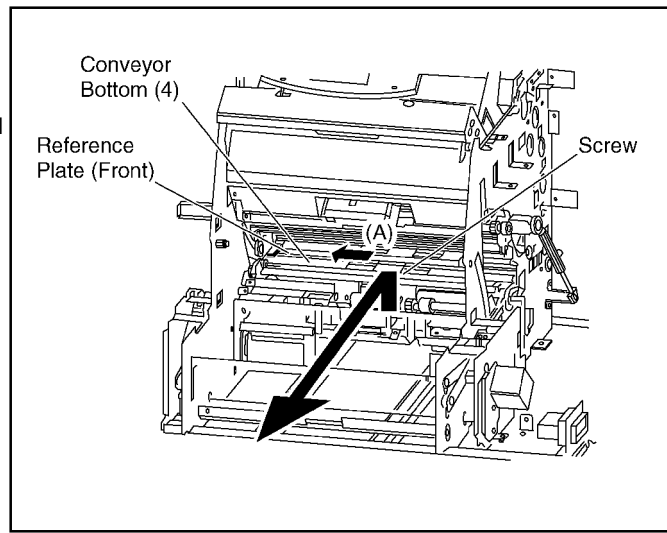


8.3.16. Drive Rollers (1) - (3)

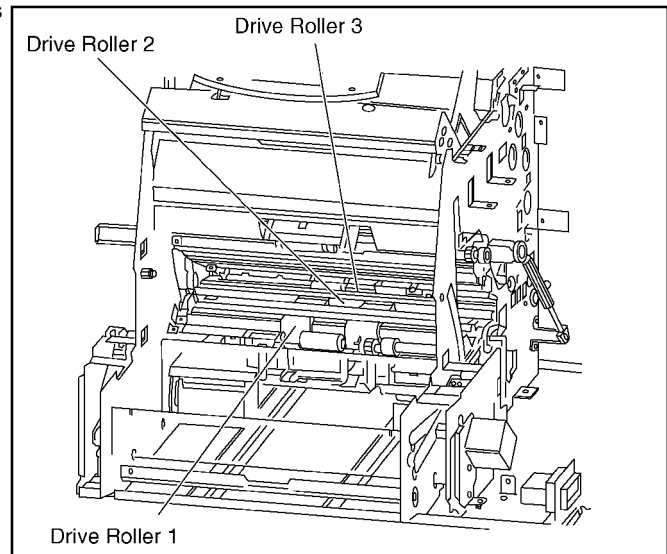
- (1) Remove the Conveyor Belt 2. (See 8.3.12)
- (2) Remove the Hopper Plate. (See 8.2.6)
- (3) Remove the 4 screws and Conveyor Bottom (1).



- (4) Unlock the Reference Plate (Front) from the notching hole of chassis while pushing the plate in the direction of the arrow (A) to remove the plate.
- (5) Remove the screw and lift the Conveyor Bottom (4) and pull out toward the front of the unit to remove.

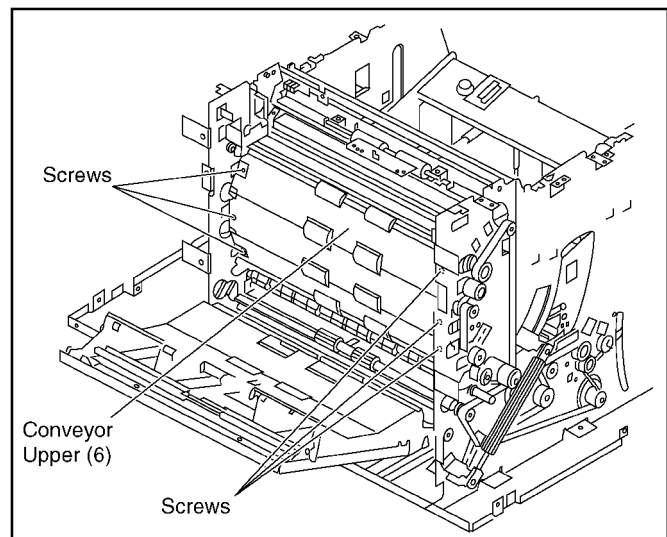


- (6) Unhook the Drive Rollers from the notching hole of chassis and remove them.



8.3.17. Conveyor Rollers (1) - (4)

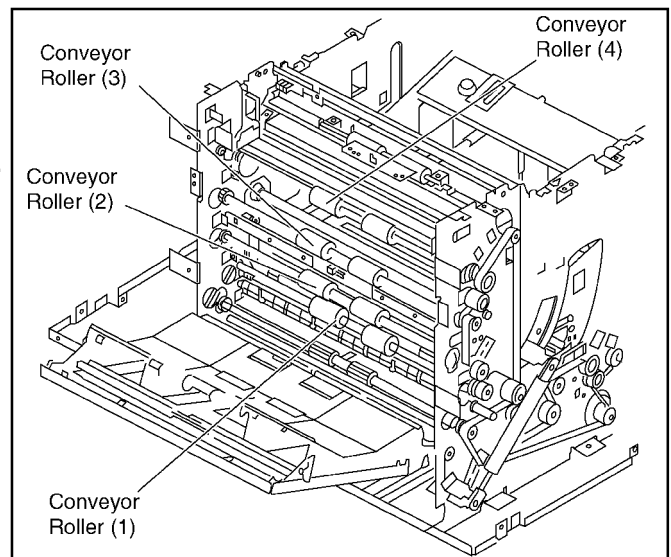
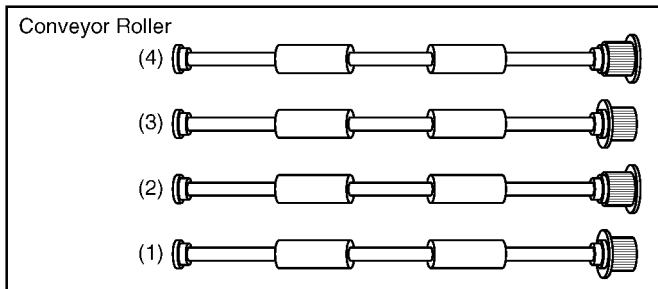
- (1) Remove the Conveyor Belt 1. (See 8.3.13)
- (2) Open the Back Door.
- (3) Remove the 6 screws and Conveyor Upper (6).



- (4) Unhook the Conveyor Rollers from the notching hole of chassis and remove them.

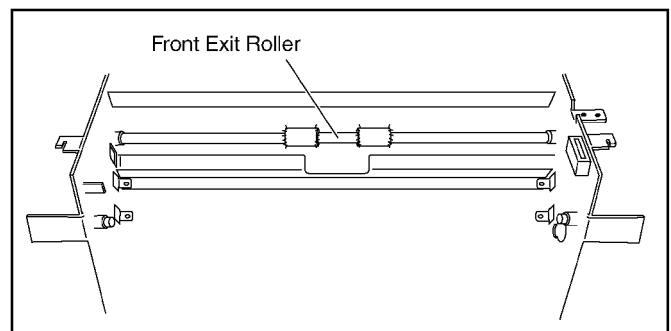
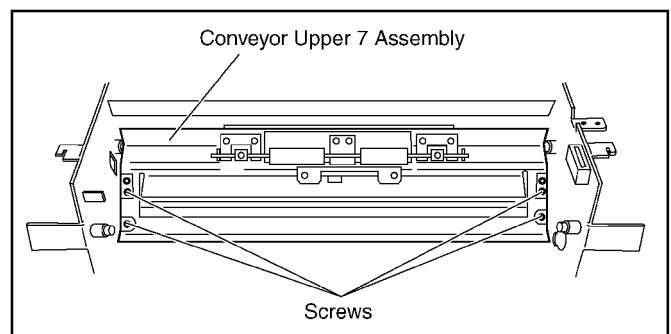
Reassembling Note

Flange of the rollers are as shown below. (Be careful not to confound the rollers with the others).



8.3.18. Front Exit Roller

- (1) Remove the Top Cover. (See 8.2.10)
- (2) Remove the Post Imprinter Door. (See 8.2.8)
- (3) Remove the 4 screws to remove the Conveyor Upper 7 Assembly.
- (4) Loosen the Conveyor Belt 1. (See 8.3.13.)
- (5) Unhook the Front Exit Roller from the notching hole of chassis and remove it.



8.4. Circuit Board Assemblies

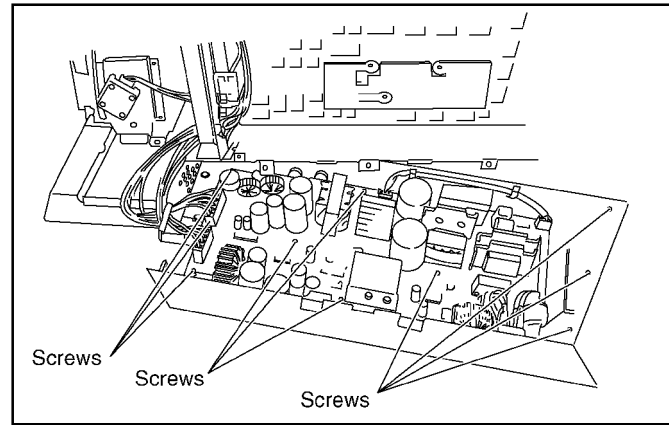
8.4.1. POWER Board

- (1) Remove the Power Unit. (See 8.3.4)
- (2) Disconnect all connectors from/to POWER Board.

Note

See Sec.11.2.

- (3) Remove the 10 screws and remove it.

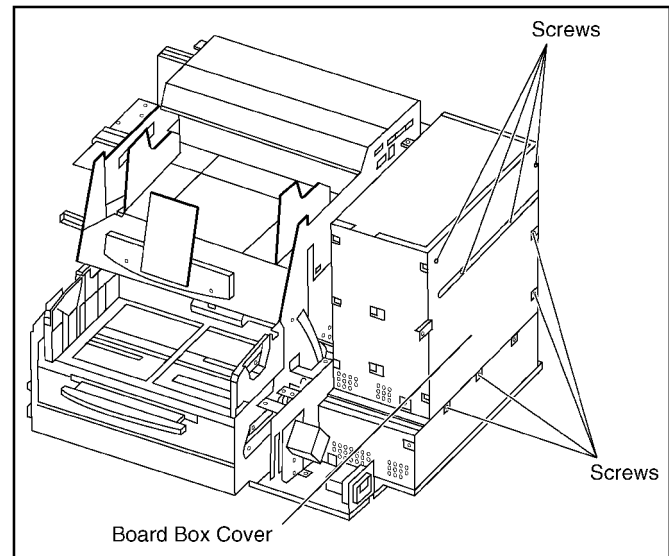


8.4.2. CONTROL Board

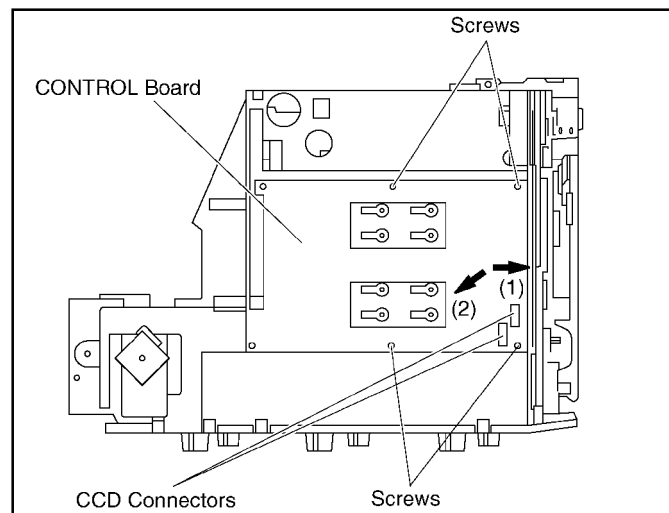
- (1) Remove the Right Front Panel. (See 8.2.2)
- (2) Remove the 8 screws and remove the Board Box Cover.
- (3) Disconnect all connectors from/to CONTROL Board.

Note

See Sec.11.2.

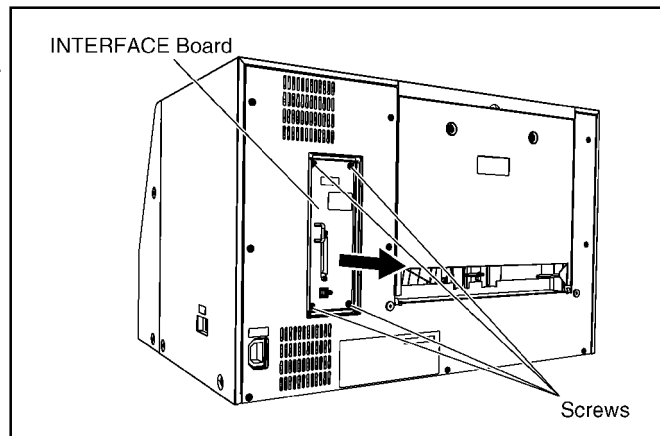


- (4) Disconnect the CCD Cable.
- (5) Remove the 4 screws.
- (6) Pull out the CONTROL Board in the direction of the arrow (1) to (2).



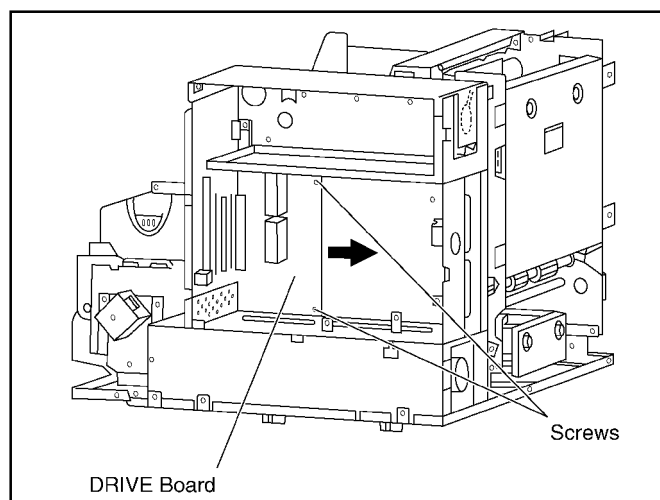
8.4.3. INTERFACE Board

- (1) Remove the 4 screws.
- (2) Pull out the INTERFACE Board in the direction of the arrow.



8.4.4. DRIVE Board

- (1) Remove the CONTROL Board. (See 8.4.2)
- (2) Remove the INTERFACE Board. (See 8.4.3)
- (3) Remove the 2 screws.
- (4) Pull out the DRIVE Board in the direction of the arrow.



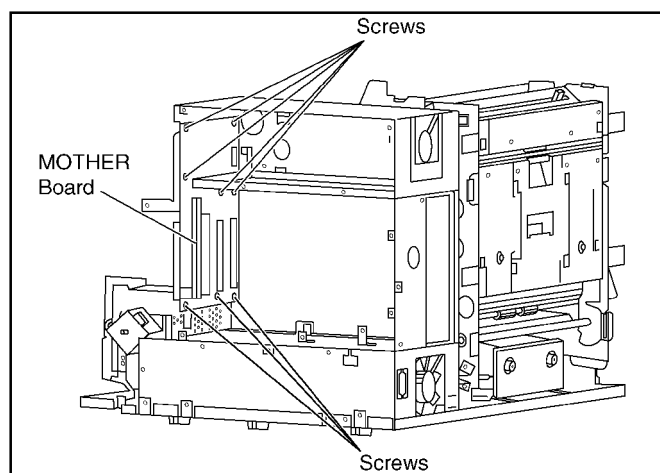
8.4.5. MOTHER Board

- (1) Remove the DRIVE Board. (See 8.4.4)
- (2) Disconnect all connectors from/to MOTHER Board.

Note

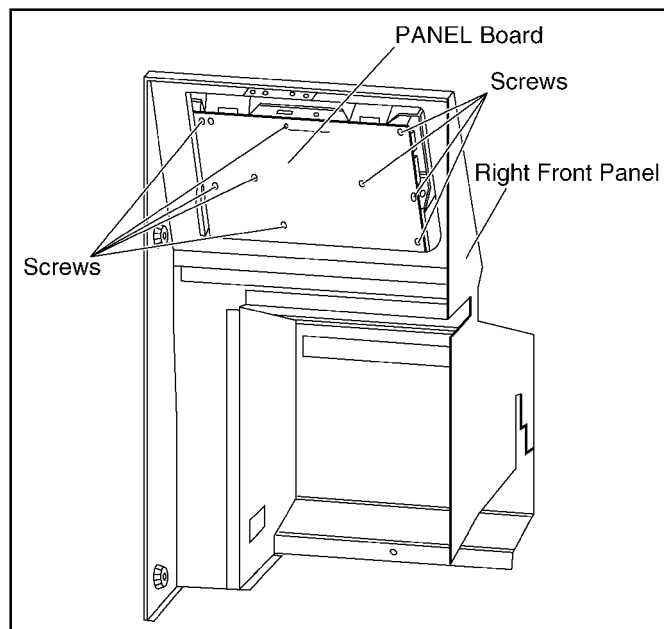
See Sec.11.2.

- (3) Remove the 8 screws and remove it.

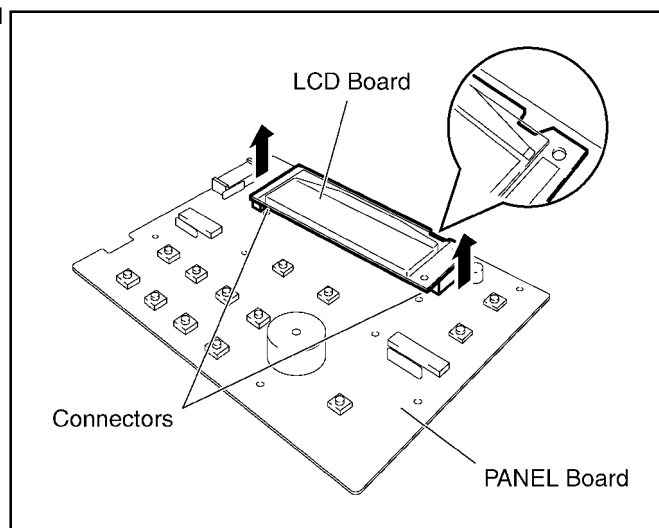


8.4.6. PANEL Board & LCD Board

- (1) Remove the Right Front Panel. (See 8.2.2)
- (2) Remove the 9 screws.
- (3) Release the PANEL Board from the Right Front Panel.

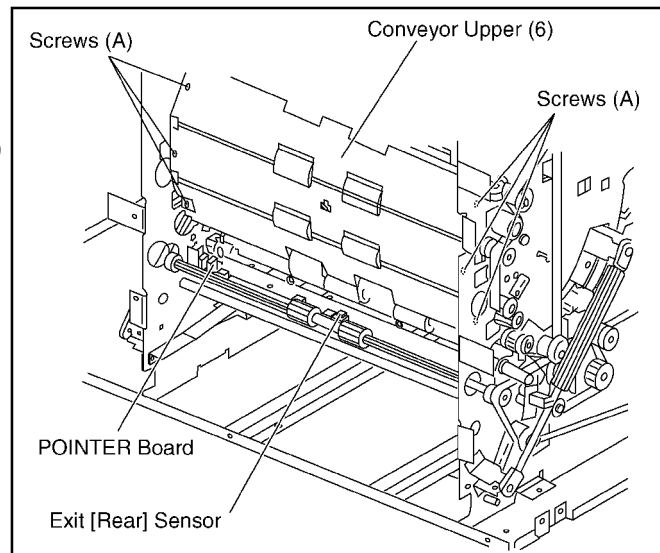


- (4) Disconnect 2 connectors on both sides of the PANEL Board to remove the LCD Board.

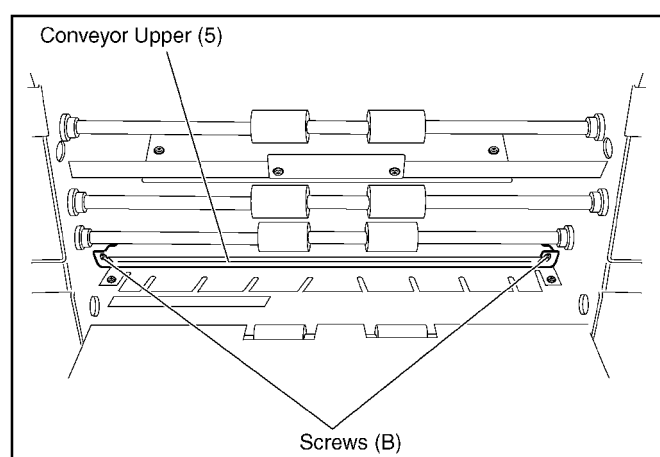


8.4.7. POINTER Board, Exit [Rear] Sensor

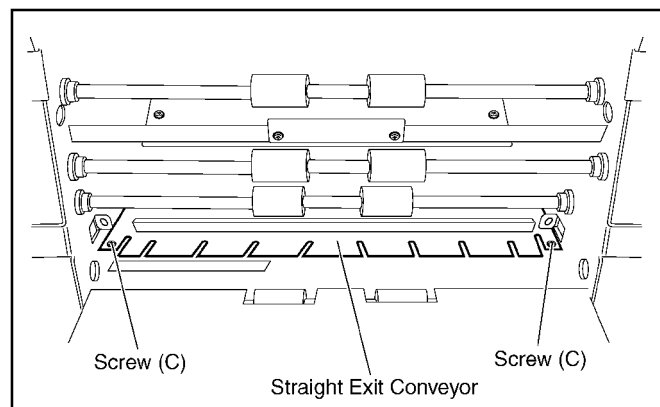
- (1) Remove the Pointer. (See 8.3.15)
- (2) Remove the Straight Exit Roller. (See 8.3.8)
- (3) Remove the 6 screws (A) and Conveyor Upper (6).
And remove the Conveyor Upper 7 Assembly. (See 8.3.18)



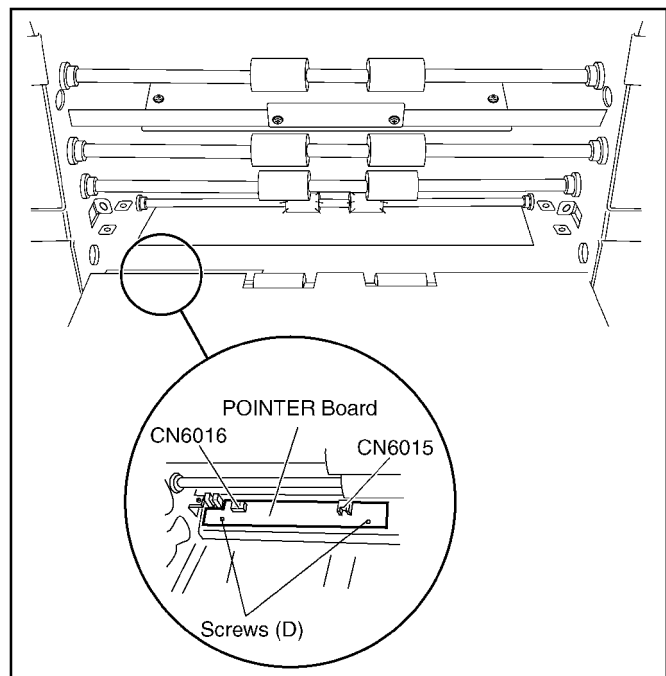
- (4) Remove the 2 screws (B) and Conveyor Upper (5).



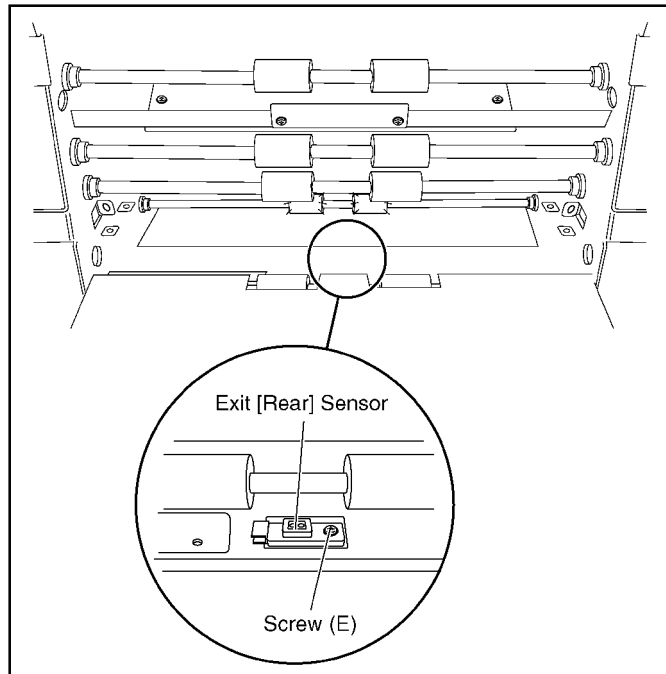
- (5) Remove the 2 screws (C) and the Straight Exit Conveyor.



- (6) Disconnect CN6015 and CN6016.
- (7) Remove the 2 screws (D) and remove the POINTER Board.

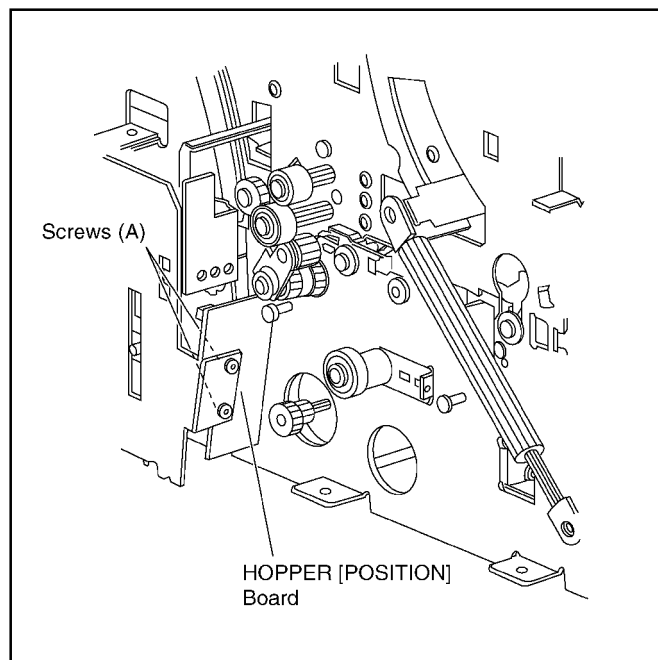


- (8) Remove the screw (E) and remove the Exit [Rear] Sensor.

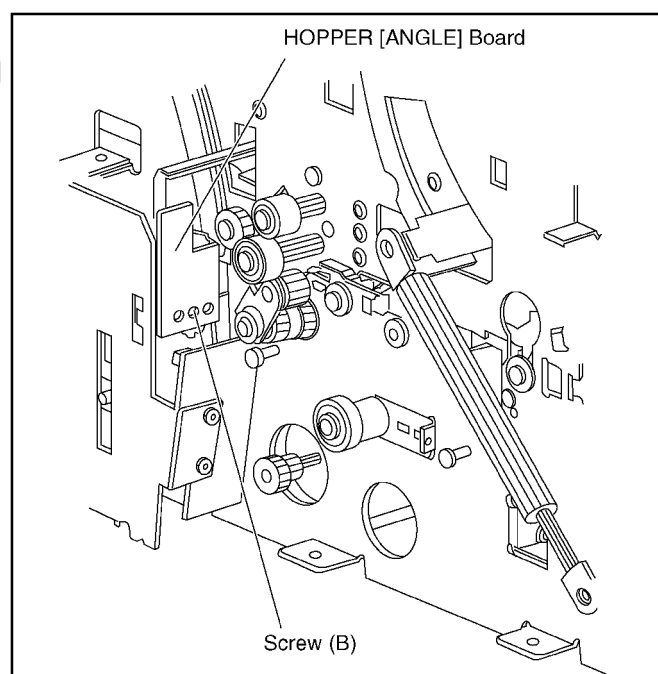


8.4.8. HOPPER [POSITION] Board, HOPPER [ANGLE] Board

- (1) Remove the Board Box & Power Box. (See 8.3.3)
- (2) Disconnect the CN6004 and CN6014.
- (3) Remove the 2 screws (A) and remove the HOPPER [POSITION] Board.

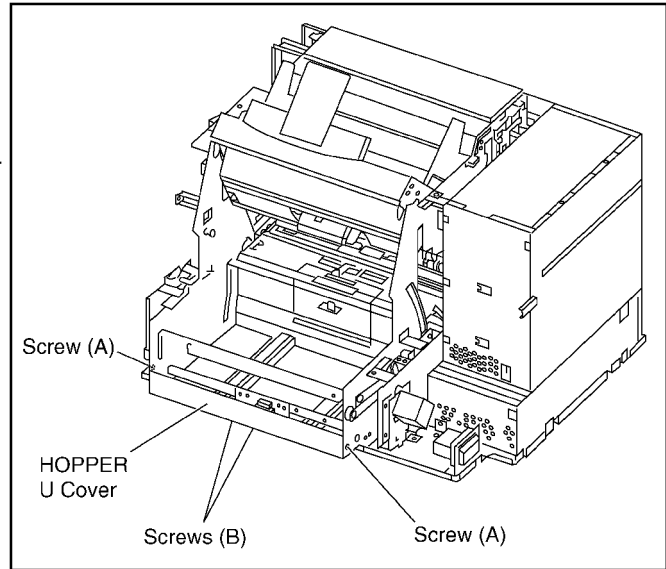


- (4) Disconnect the CN6002.
- (5) Remove the screw (B) and remove the HOPPER [ANGLE] Board.

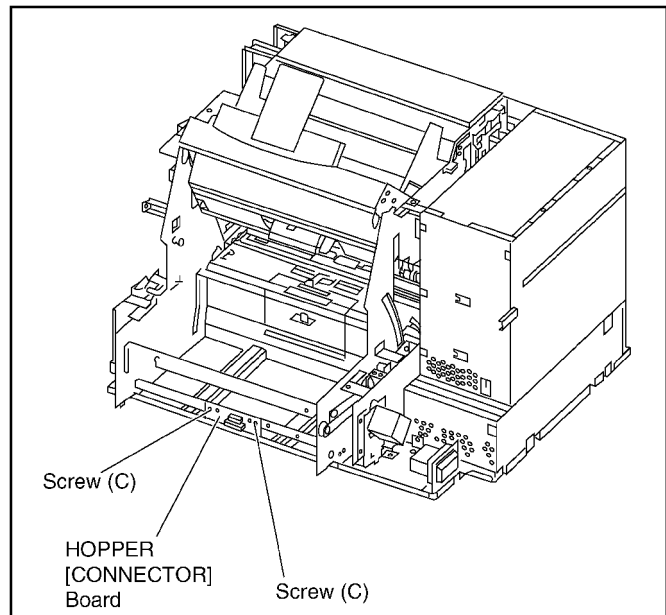


8.4.9. HOPPER [CONNECTOR] Board

- (1) Remove the Hopper Plate. (See 8.2.6)
- (2) Remove the Right Front Panel. (See 8.2.2)
- (3) Remove the Left Front Panel. (See 8.2.4)
- (4) Remove the 2 screws (A), the 2 screws (B) and the Hopper U Cover.
- (5) Disconnect the CN6005.

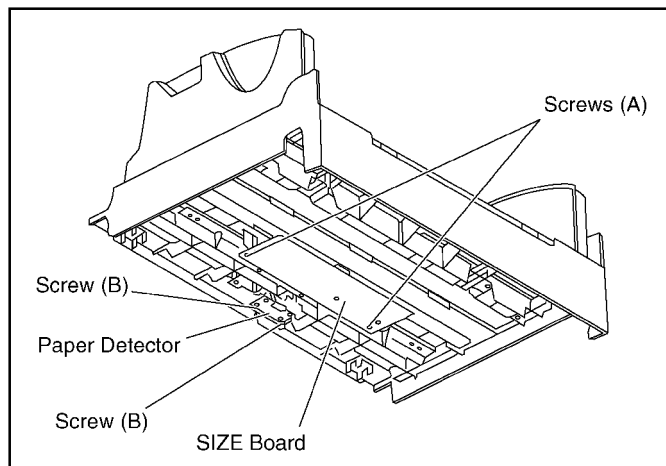


- (6) Remove the 2 screws (C) and remove it.



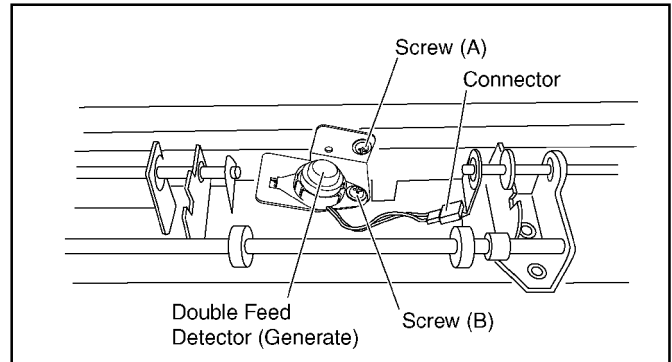
8.4.10. SIZE Board, Paper Detector

- (1) Remove the Hopper Plate. (See 8.2.6)
- (2) Disconnect the CN6013 and CN6001.
- (3) Remove the 2 screws (A) and remove SIZE Board.
- (4) Remove the 2 screws (B) and remove Paper Detector.



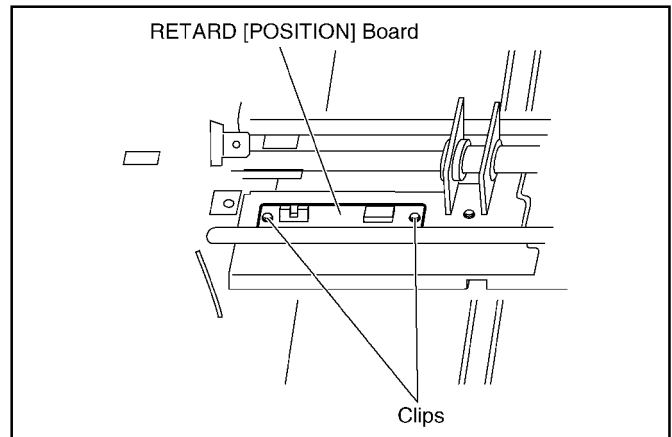
8.4.11. Double Feed Detector (Generate)

- (1) Remove the Conveyor Bottom 1. (See 8.3.16.)
- (2) Remove the Retard Roller. (See 7.5.2)
- (3) Remove the screw (A) and disconnect the connector to remove the Double Feed Detector (Generate) with the plate.
- (4) Remove the screw (B) on the Double Feed Detector (Generate).



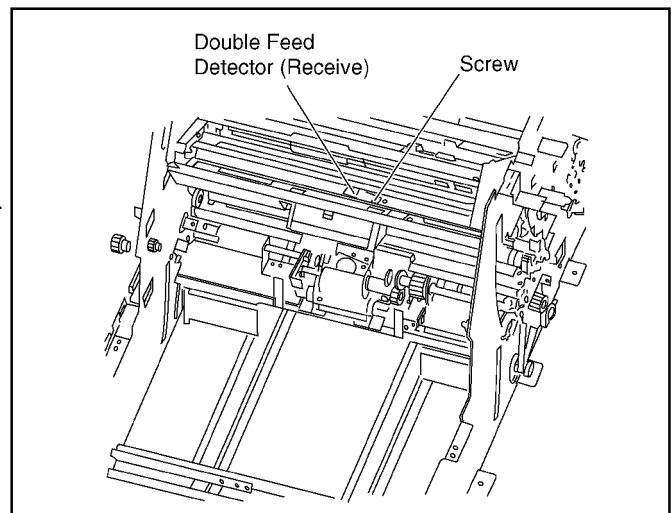
8.4.12. RETARD [POSITION] Board

- (1) Remove the Conveyor Bottom 1. (See 8.3.16.)
- (2) Release the 2 Clips on the RETARD [POSITION] Board.
- (3) Disconnect the CN6022.



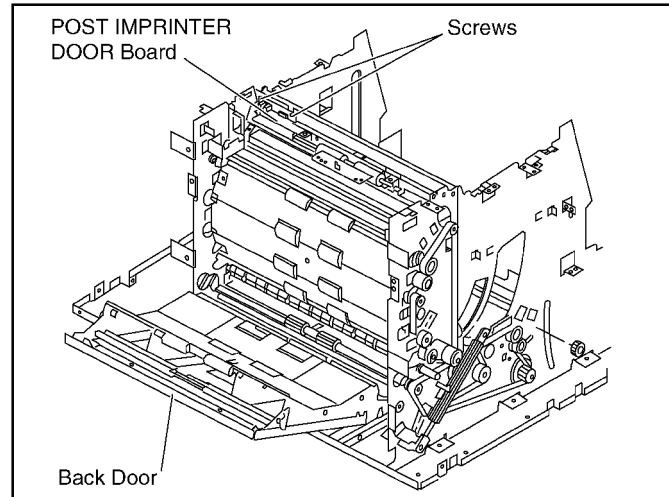
8.4.13. Double Feed Detector (Receive)

- (1) Remove the Front Side Optical Unit. (See 8.3.1)
- (2) Remove the screw.
- (3) Disconnect the Cable to release the Double Feed Detector (Receive) with the plate from the scanner.
- (4) Remove the screw on the Double Feed Detector (Receive).



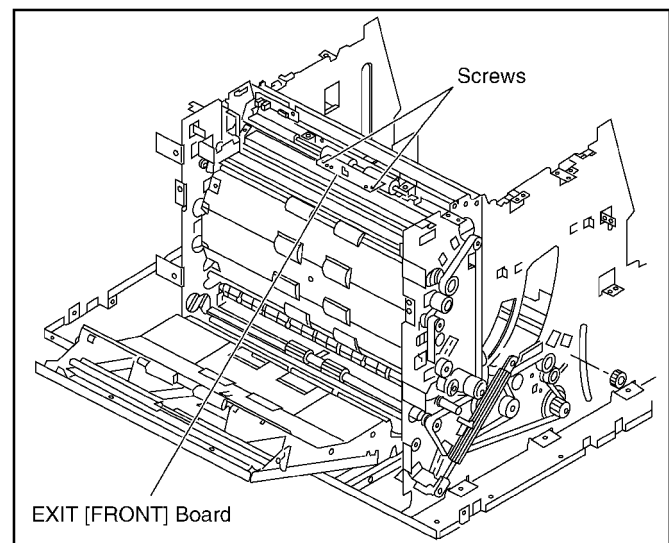
8.4.14. POST IMPRINTER DOOR Board

- (1) Remove the Post Imprinter Door. (See 8.2.8)
- (2) Open the Back Door.
- (3) Remove the 2 screws.
- (4) Disconnect the CN6006.



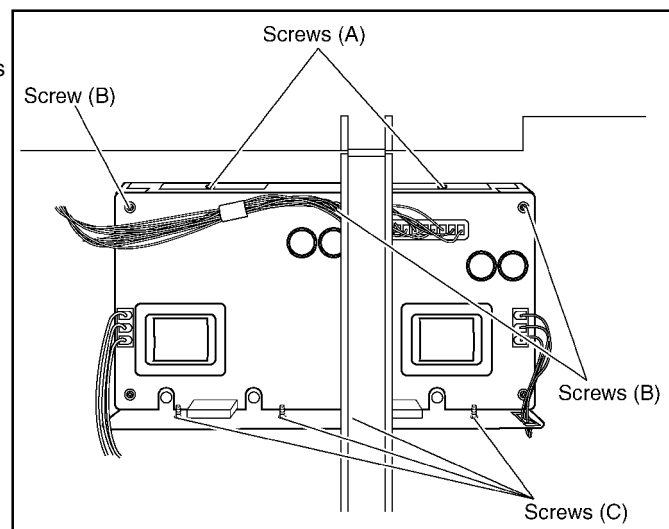
8.4.15. EXIT [FRONT] Board

- (1) Remove the Post Imprinter Door. (See 8.2.8)
- (2) Open the Back Door.
- (3) Remove the 2 screws.
- (4) Disconnect the CN6017.



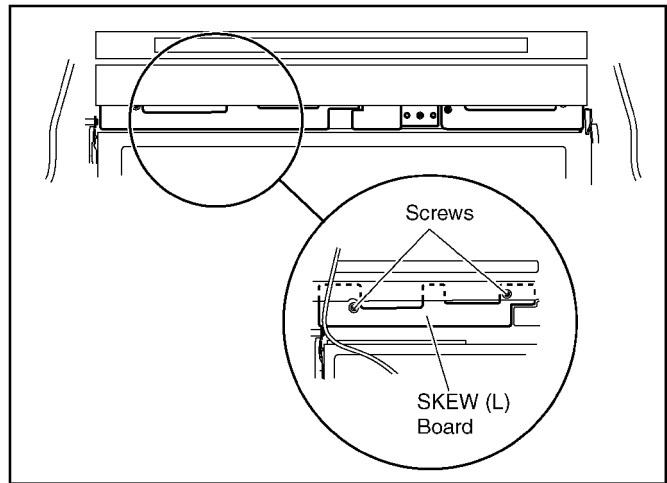
8.4.16. LAMP INVERTER Board

- (1) Remove the Left Front Panel. (See 8.2.4)
- (2) Remove the 2 screws (A) and disconnect the all connectors from the LAMP INVERTER Board.
- (3) Remove the 3 screws (B) and 4 screws (C) on the LAMP INVERTER Board.



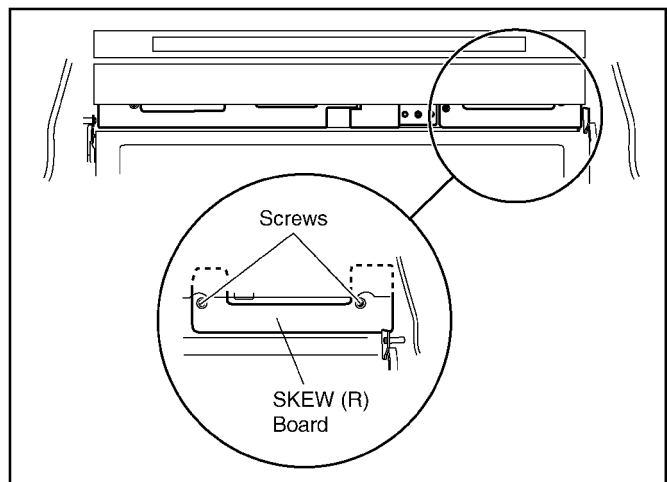
8.4.17. SKEW (L) Board

- (1) Remove the Double Feed Detector (Receive). (See 8.4.13)
- (2) Remove the 2 screws.
- (3) Disconnect the CN6020.



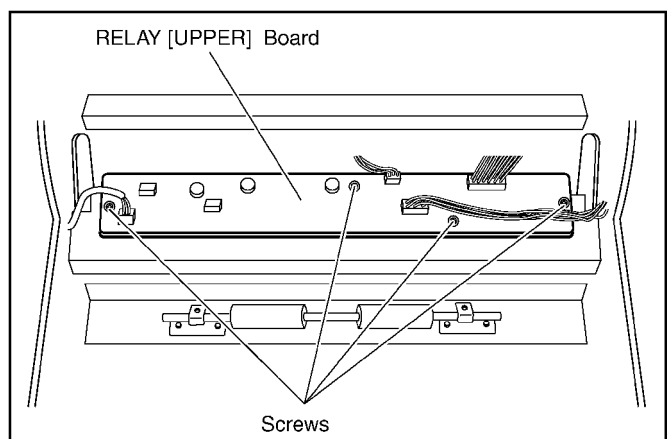
8.4.18. SKEW (R) Board

- (1) Remove the Double Feed Detector (Receive). (See 8.4.13)
- (2) Remove the 2 screws.
- (3) Disconnect the CN6023.



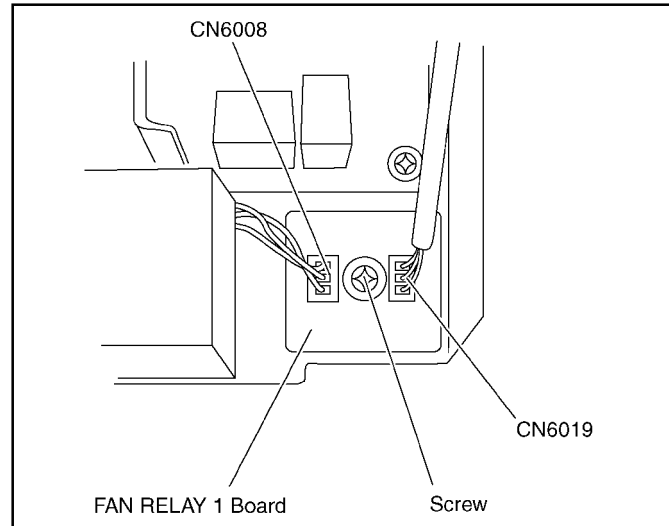
8.4.19. RELAY [UPPER] Board

- (1) Remove the Double Feed Detector (Receive). (See 8.4.13)
- (2) Remove the 4 screws.
- (3) Disconnect all connectors on the RELAY [UPPER] Board.

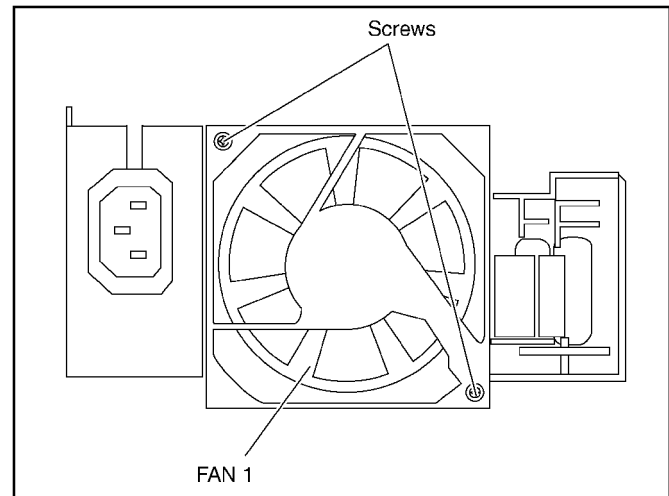


8.4.20. FAN RELAY 1 Board & FAN 1

- (1) Remove the Power Unit. (See 8.3.4)
- (2) Disconnect CN6008 and CN6019 on the FAN RELAY 1 Board.
- (3) Remove the screw on the FAN RELAY 1 Board.

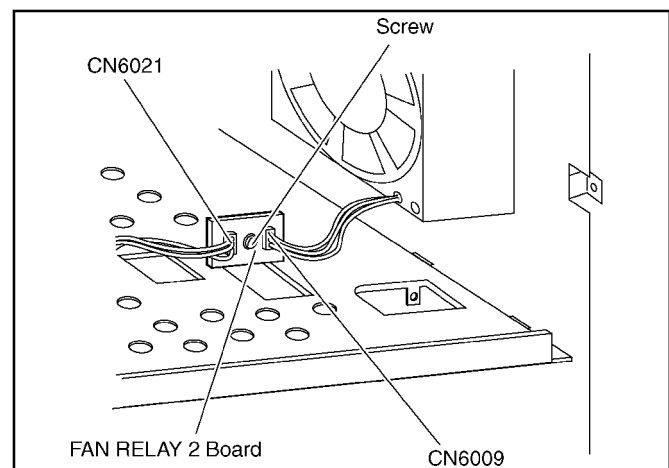


- (4) Remove the 2 screws from FAN 1.

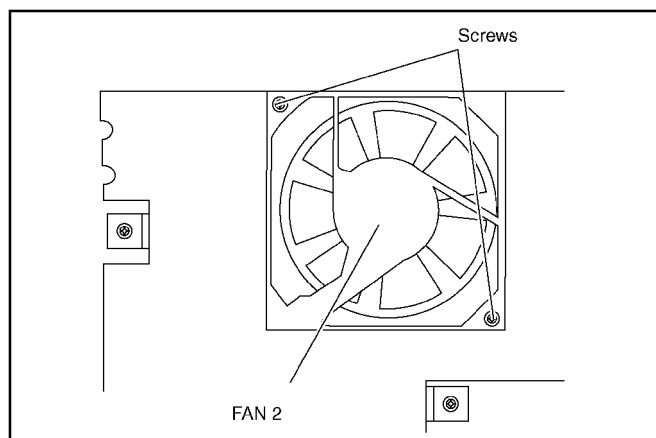


8.4.21. FAN RELAY 2 Board & FAN 2

- (1) Remove the Right Front Panel. (See 8.2.2)
- (2) Remove the Board Box Cover. (See 8.4.2-(2))
- (3) Disconnect CN6009 and CN6021 on the FAN RELAY 2 Board.
- (4) Remove the screw (A) and remove FAN RELAY 2 Board.

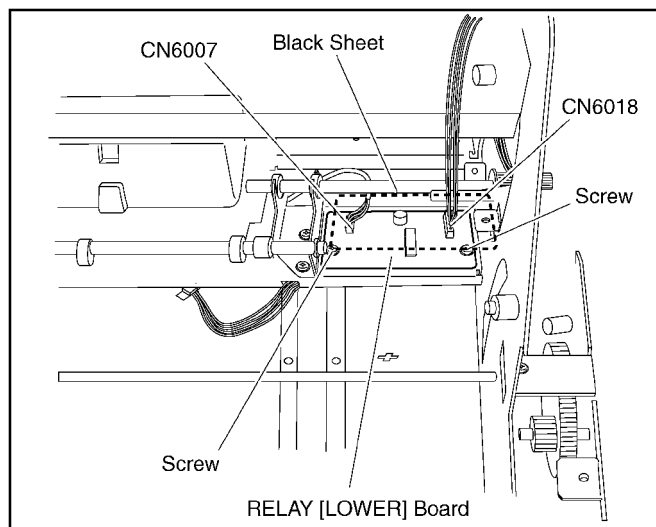


- (5) Remove the 2 screws (B) from FAN 2.



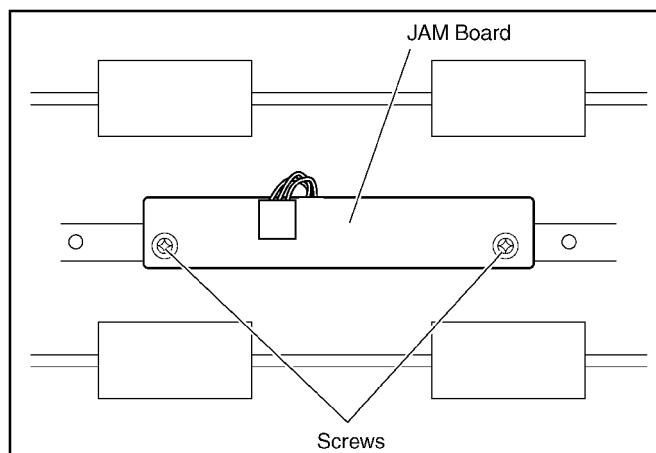
8.4.22. RELAY [LOWER] Board

- (1) Remove the Conveyor Bottom (1). (See 8.3.16)
- (2) Remove the black sheet over the RELAY [LOWER] Board.
- (3) Disconnect CN6007 and CN6018 on the RELAY [LOWER] Board.
- (4) Remove the 2 screws on the RELAY [LOWER] Board.



8.4.23. JAM Board

- (1) Remove the Conveyor Upper 6. (See 8.3.17)
- (2) Remove the 2 screws on the JAM Board.
- (3) Disconnect the CN6024 on the JAM Board.

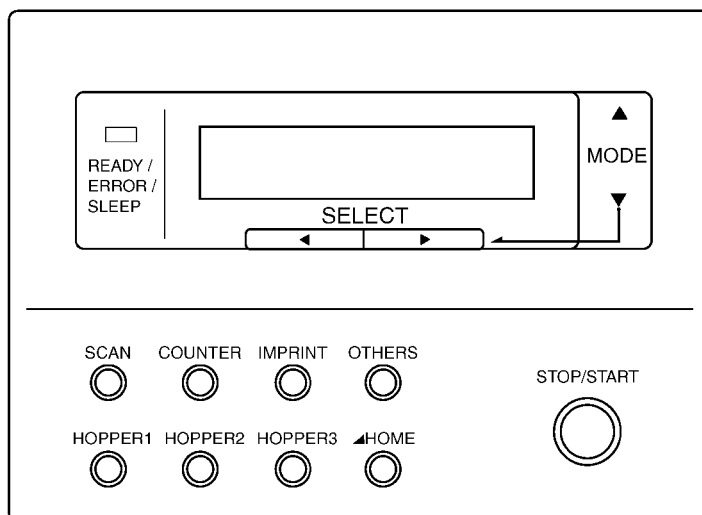


9 OPERATION

9.1. Front Panel Specifications

Item	Content
Indication Device	LCD Display
Indication Matrix	20 Characters × 2 lines
Kind of Character displayed	Alphabet, Number, Square Phonetic, Japanese Syllabary
Indicated Contents	System Status (Initializing, Ready, Scanning, Sleep, Error, Warning) Setting (Hopper position, Scanning, Counter, Imprinter, Others) Service Mode
Indicated Languages	English, German, Japanese
Operation Key	SCAN, COUNTER, IMPRINT, OTHERS, HOPPER1, HOPPER2, HOPPER3, ◀, ▶, ▲, ▼, HOME, STOP/START Note Pushing each key for more than 0.5 sec enables Repeat Mode

Display panel and keys



SCAN : Press to enter the scanning setting menu.

COUNTER : Press to enter the counter setting menu.

IMPRINT : Press to enter the imprinter setting menu.

OTHERS : Press to enter the other setting menu.

HOPPER1 : Press to change the hopper position.
Hopper capacity with 17lbs paper
HOPPER2 : Hopper1 : 1,000page setting
Hopper2 : 200page setting
Hopper3 : 1page setting

HOME : Press to exit from the setting section and return to the ready status.
Also, this function can change the display language.

STOP / START : Used to start or stop scanning a document.

LCD

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

 :

Up to 40 characters can be displayed during scanning or setting

▲ : Press to advance to the next mode in the selected menu.

▼ : Press to return to the previous mode in the selected menu.

▶ : Press to advance to the next value in the selected mode.

◀ : Press to return to the previous value in the selected mode.

LED Indicates the status of the scanner.

Green: Ready to scan or scanning
Green (flashing): Sleeping (No warning)
Red: An error has occurred.
Orange: Initializing, Warning
Orange (flashing): Sleeping (Warning)

Note: Setting the language

- (1) Turn the power while pressing the HOME key.

S	e	t		L	a	n	g	u	a	g	e							←	→
				E	n	g	l	i	s	h		L	e	t	t	e	r		

↓ Push " ► " key once.

- (2) Use the [◀] key or [▶] key to select the "English Letter", "English A4" or "Deutsch A4", " ニホンゴ A4 ".

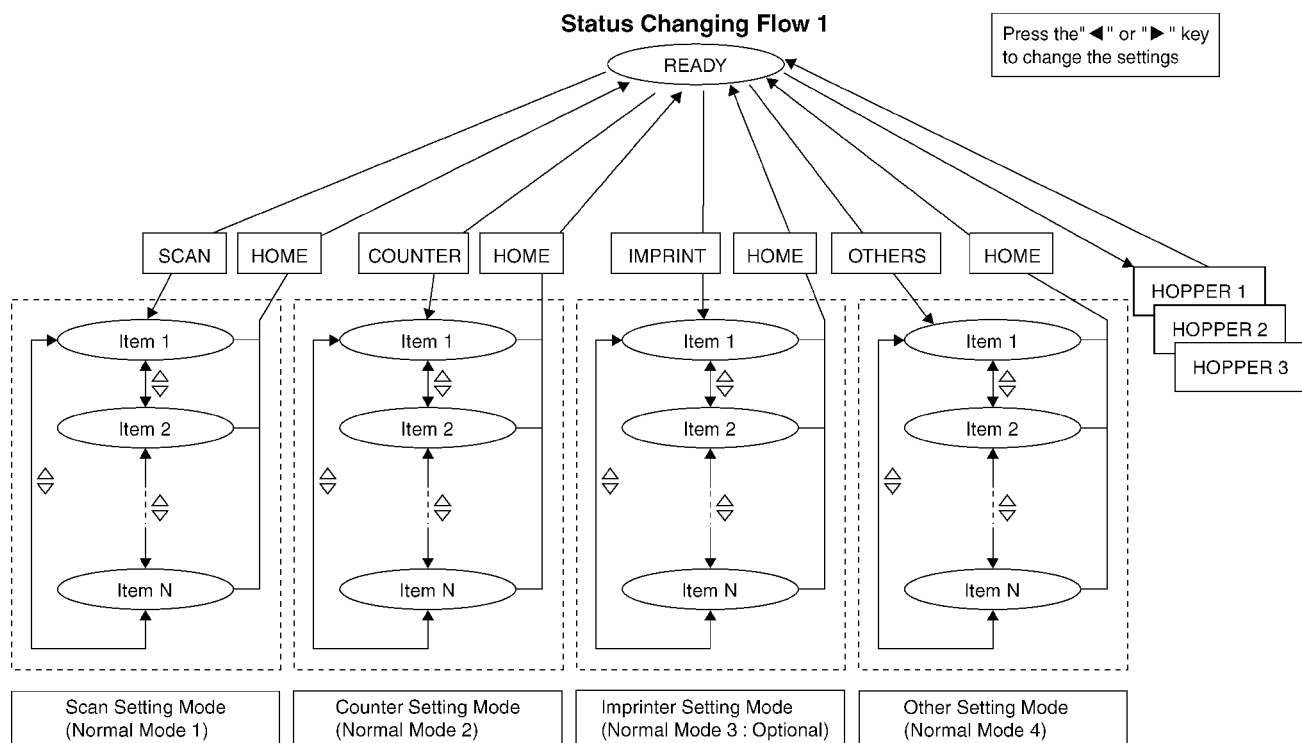
S	e	t		L	a	n	g	u	a	g	e							←	→
				E	n	g	l	i	s	h								A	4

- (3) Press the HOME key.

- The display will change to the select language, then the scanner will be ready.
- This setting will remain until it is changed to another setting.

R	e	a	d	y															

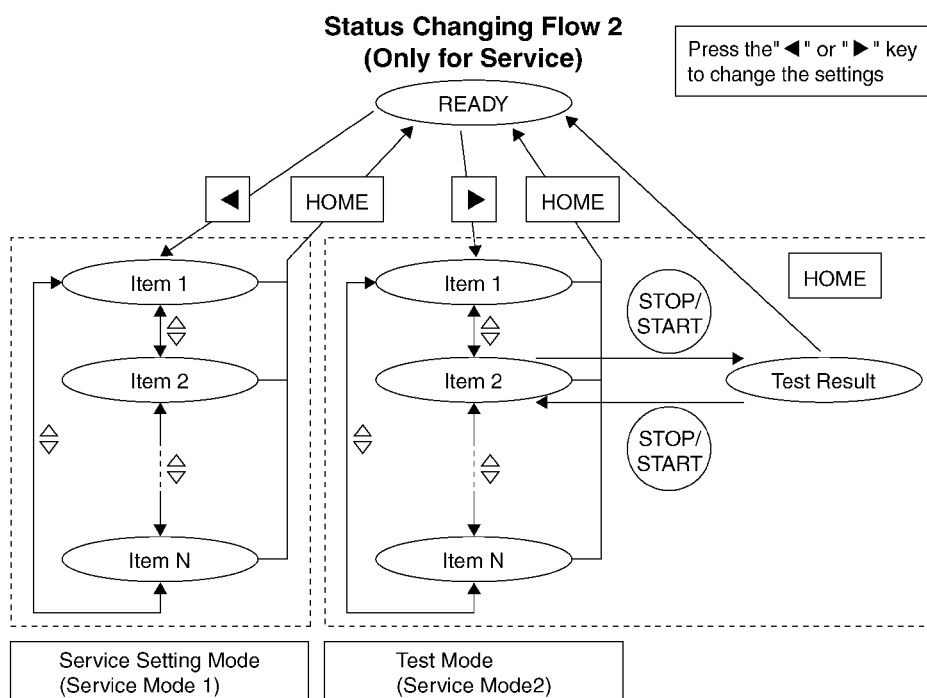
9.2. Operation-1 (Normal Mode)



By pressing another key, you can enter the other Setting Mode directly, without returning back the **READY** Mode. The Imprinter Setting Mode will operate only if the Imprinter (optional) has been installed in Scanner.

9.3. Operation-2 (Service Mode)

To enter Service Mode, turn on the Scanner while pressing the **SCAN** and the **OTHERS** keys simultaneously. Service Mode includes the Service Setting Mode and Test Mode. The Service Setting Mode offers functions that are not available in Normal Mode. The Service Setting Mode has "Set Warning value for timing if cleaning or replacing roller", and so on. The Test Mode has a scanning test and shading and so on. The Service Mode can be available until the power is turned off.



9.4. Setting List

9.4.1. Scan Setting Mode (Normal Mode 1)

No	Item	Setting Contents												Default	Factory Default	Remarks
1	F. Drop Out	Host	Green	Red	Blue									Host	Host	(1)
2	F. Brightness	Host	D4	D3	D2	D1	Norm	L1	L2	L3	L4			Host	Host	(1)
3	F. Image Emphasis	Host	Smooth	None	Low	Medium	High							Host	Host	(1)
4	F. Contrast	Host	L4	L3	L2	L1	Norm	H1	H2	H3	H4			Host	Host	(1)
5	F. Halftone	Host	Binary	Bayer dither 64	Bayer dither 16	Halftone dot 32	Halftone dot 64	Error diffusion	Dynamic Threshold					Host	Host	(1)
6	B. Drop Out	Host	Green	Red	Blue									Host	Host	(1)
7	B. Brightness	Host	D4	D3	D2	D1	Norm	L1	L2	L3	L4			Host	Host	(1)
8	B. Image Emphasis	Host	Smooth	None	Low	Medium	High							Host	Host	(1)
9	B. Contrast	Host	L4	L3	L2	L1	Norm	H1	H2	H3	H4			Host	Host	(1)
10	B. Halftone	Host	Binary	Bayer dither 64	Bayer dither 16	Halftone dot 32	Halftone dot 64	Error diffusion	Dynamic Thres.					Host	Host	(1)
11	Noise Reduction	Host	None	B 1×1	–	B 6×6	W 1×1	–	W 6×6					Host	Host	(1)
12	Remove Shadow	Host	Disable	Enable										Host	Host	(1)
13	Fit To Page	Host	Disable	Enable										Host	Host	(1)
14	Double Feed	Host	Not detect	Detect										Host	Host	(1)
15	Double Feed (Action after detecting double feed)	Host	Stop	Buzzer										Host	Host	(1)
16	Double Feed Setting (Set Sensitivity)	Host	Low Sensitivity	Normal Sensitivity	High Sensitivity									Host	Host	(1)
17	Feeding Speed	Host	Slow	Normal										Host	Host	(1)
18-a	Save Setting (Select memory)	Memory 1	Memory 2											Memory1	Memory1	(1)
18-b	Save Setting (Memorize scanning condition to EEPROM)	Exec												–	–	–
19	Load setting data (for scanning condition)	Default	Memory 1	Memory 2										Default	Default	(1)

Remarks

- (1): Parameter setting by user
- (2): Status Indication
- (3): Parameter setting by service-man
- (4): Adjustment
- (5): Diag.

9.4.2. Counter Setting Mode (Normal Mode 2)

No	Item	Setting Contents												Default	Factory Default	Remarks
1	Display Counter	Scan	User	System										Scan	Scan	(1)
2-a	User Counter (Set counter value)	0 – 9999999												0	0	(1)
2-b	User Counter (Set increment value)	+1 – +9												+1	+1	(1)
2-c	User Counter (Clear user counter)	Exec (Clear)												–	–	–
3	System Counter													–	–	(2)

Remarks

- (1): Parameter setting by user
- (2): Status Indication
- (3): Parameter setting by service-man
- (4): Adjustment
- (5): Diag.

9.4.3. Imprinter Setting Mode (Normal Mode 3: Optional)

No	Item	Setting Contents												Default	Factory Default	Remarks
11	Post Imprint (Select contents to print)	Host	Count											Host	Host	(1)
12	Post Position (Set starting position to be printed)	Host	0 ~ 72 Char.											Host	Host	(1)
13	Post Font	Host	Bold	Normal										Host	Host	(1)
14	Post Orientation	Host	0°	90°	180°	270°								Host	Host	(1)
15	Post Cleaning	Exec														(4)

Remarks

- (1): Parameter setting by user
- (2): Status Indication
- (3): Parameter setting by service-man
- (4): Adjustment
- (5): Diag.

Note

- The Imprinter Setting Mode is available only if the optional Imprinter is installed.
- The above Imprinter Setting Mode 11-15 will not be displayed if the Post Imprinters is not installed.
- Regarding “12. Post Position”
Set the position from which printing starts, based on the top of the sheet.

9.4.4. Other Setting Mode (Normal Mode 4)

No	Item	Setting Contents												Default	Factory Default	Remarks
1-a	Firmware version (CONTROL)													-	-	(2)
1-b	Firmware version * ¹ (INTERFACE)													-	-	(2)
1-c	Firmware version * ² (Post-Imprinter)													-	-	(2)
2	Buzzer	OFF	ON											ON	ON	(1)
3	SCSI ID * ³	0-15 or 0-7												6	6	(1)
4	Wide SCSI * ³	Disable	Enable											Enable	Enable	(1)
5	Transfer Rate	Wide 40 MB/s or 20 MB/s	Wide 20 MB/s or 10 MB/s											Wide 40 MB/s	Wide 40 MB/s	(1)
6-a	Clean Roller Warning (Disp.%)	~ %												0 %	0 %	(2)
6-b	Clean Roller (Clear warning for "Clean Roller")	Clear												-	-	-
7-a	Replace Roller Warning (Disp.%)	~ %												0 %	0 %	(2)
7-b	Replace Roller (Clear warning for "Replace Roller")	Clear												-	-	-
8-a	Product ID (for KV-S3105C Series) * ⁴	KV-S3105C	KV-SS905C	KV-SS855										KV-S3105C	KV-S3105C	-
8-b	Product ID (for KV-S3085 Series) * ⁴	KV-S3085	* ⁵ KV-SS905C	KV-SS855										KV-S3085	KV-S3085	-
9	Sleep Mode (Set period to enter in Sleep Mode.)	Disable	1 ~ 60 min.											15 min.	15 min.	(1)

Remarks

- (1): Parameter setting by user
- (2): Status Indication
- (3): Parameter setting by service-man
- (4): Adjustment
- (5): Diag.

Note

- *¹ : This information on LCD includes amount value for additional memory. This version information will not be displayed when INTERFACE Board is not installed.
- *² : This version information will not be displayed when Post-Imprinter is not installed.
- *³ : In case that Wide SCSI setting is "Enable": SCSI ID Range 0 to 15, Transfer Rate: Wide 40 MB/s or Wide 20 MB/s. Setting the SCSI ID, Wide SCSI, and Transfer Rate will be activated after restarting the power.
- *⁴ : Setting the Product ID will be activated after restarting the power.
- *⁵ : This content "KV-SS905C" will be selectable only in case the optional "Color upgrade kit" has been installed in scanner KV-S3085 Series.

9.4.5. Service Setting Mode (Service Mode 1)

No	Item	Setting Contents												Default	Factory Default	Remarks
1-a	PCB Revision No. (CONTROL)													-	-	(2)
1-b	PCB Revision No. (INTERFACE)													-	-	(2)
1-c	PCB Revision No. (DRIVE)													-	-	(2)
1-d	PCB Revision No. (F.CCD)													-	-	(2)
1-e	PCB Revision No. (B.CCD)													-	-	(2)
2	Clean Roller (Set counter for roller cleaning timing)	5,000 1,000,000												20,000	20,000	(3)
3	Replace Roller (Set counter for roller replacement timing)	5,000 1,000,000												300,000	300,000	(3)
4	Detect Width	A4	Letter											*1	-	-
5	Adjust value for Length manually	0-255												-	-	(4)
6	Adjust value for Front V. Position manually	0-255												-	-	(4)
7	Sensor Delay 1 (Adjust value for Sensor Delay OFF → ON manually)	128-255												-	-	(4)
8	Sensor Delay 2 (Adjust value for Sensor Delay ON → OFF manually)	128-255												-	-	(4)
9	Sensor Hysteresis (Adjust value for Sensor Switching ON → OFF manually)	128-255												-	-	(4)
10	Adjust value for Front Width manually	8-128												-	-	(4)
11	Adjust value for Front H.Position manually	0-255												-	-	(4)
12	Adjust value for Back V.Position manually	0-255												-	-	(4)
13	Adjust value for Back Width manually	8-128												-	-	(4)
14	Adjust value for Back H. Position manually	0-255												-	-	(4)
15	Set Default	Exec												-	-	(3)
16	Reset Language	Exec												-	-	-

Remarks

- (1): Parameter setting by user
- (2): Status Indication
- (3): Parameter setting by service-man
- (4): Adjustment
- (5): Diagnostics

Note

*1 : Setting content (A4 or Letter) on this item 4 depends on “Set language”.

Select Mode		Detect Width
English A4	→	A4
English Letter	→	Letter
Deutsch A4	→	A4
ニホンゴ A4	→	A4

9.4.6. Test Mode (Service Mode 2)

No	Item	Setting Contents												Default	Factory Default	Remarks
1-a	Feed Test (Set Resolution and Test)	100-600	START											200	-	(5)
1-b	Feed Test (Set Size and Test)	A4	A5	A6	B4	B5	B6	B.C	Max	Ltr	Lgl	A3	START	A4	-	(5)
1-c	Feed Test (Set scanning type and Test)	Duplex	Simplex	START										Duplex	-	(5)
1-d	Feed Test (Set image type and Test)	Binary	DTH	Gray	Color	M.S. Color	START							Binary	-	(5)
1-e	Feed Test (Set Length Control and Test)	LC ON	LC OFF	START										LC ON	-	(5)
1-f	Feed Test (Set Mode and Test)	Mode 1	Mode 2	Mode 3	START									Mode 1	-	(5)
2-a	CCD Test (F. Lamp)	OFF	1-15	START										-	-	(5)
2-b	CCD Test (F0 Amp)	0-255	START											-	-	(5)
2-c	CCD Test (F1 Amp)	0-255	START											-	-	(5)
2-d	CCD Test (B. Lamp)	OFF	1-15	START										-	-	(5)
2-e	CCD Test (B0 Amp)	0-255	START											-	-	(5)
2-f	CCD Test (B1 Amp)	0-255	START											-	-	(5)
3	CCD Black Level	START												-	-	(5)
4	Document Sensor (Check each document sensor condition)	START												-	-	(5)
5	Document Sensor Sensitive Level	START												-	-	(5)
6	Door & Home Sensor	START												-	-	(5)
7	Hopper Test	START												-	-	(5)
8	Conveyor Motor	START												-	-	(5)
9	Feed Motor	START												-	-	(5)
10	Aging	START												-	-	(5)
11	DIMM SPD *2 (Information)													-	-	(2)
12-a	Memory Test (CONTROL)	START												-	-	(5)
12-b	Memory Test (IMAGE)	START												-	-	(5)
12-c	Memory Test (DIMM) *2	START												-	-	(5)
13	Sleep Mode	START												-	-	(5)
14	Init. EEPROM *1	START												-	-	-
15	Double Feed Test (Check double feed sensitivity after setting input-level)	1-255	START											-	-	(5)
16	Adjust Double Feed Detector	START												-	-	(4)
17	Adjust Length automatically	START												-	-	(4)
18	Adjust Front V. Position automatically	START												-	-	(4)
19	Adjust Front Width automatically	START												-	-	(4)
20	Adjust Front H. Position automatically	START												-	-	(4)
21	Adjust Back V. Position automatically	START												-	-	(4)
22	Adjust Back Width automatically	START												-	-	(4)
23	Adjust Back H. Position automatically	START												-	-	(4)
24	Adjust All position & Length automatically	START												-	-	(4)
25	Adjust Shading	START												-	-	(4)

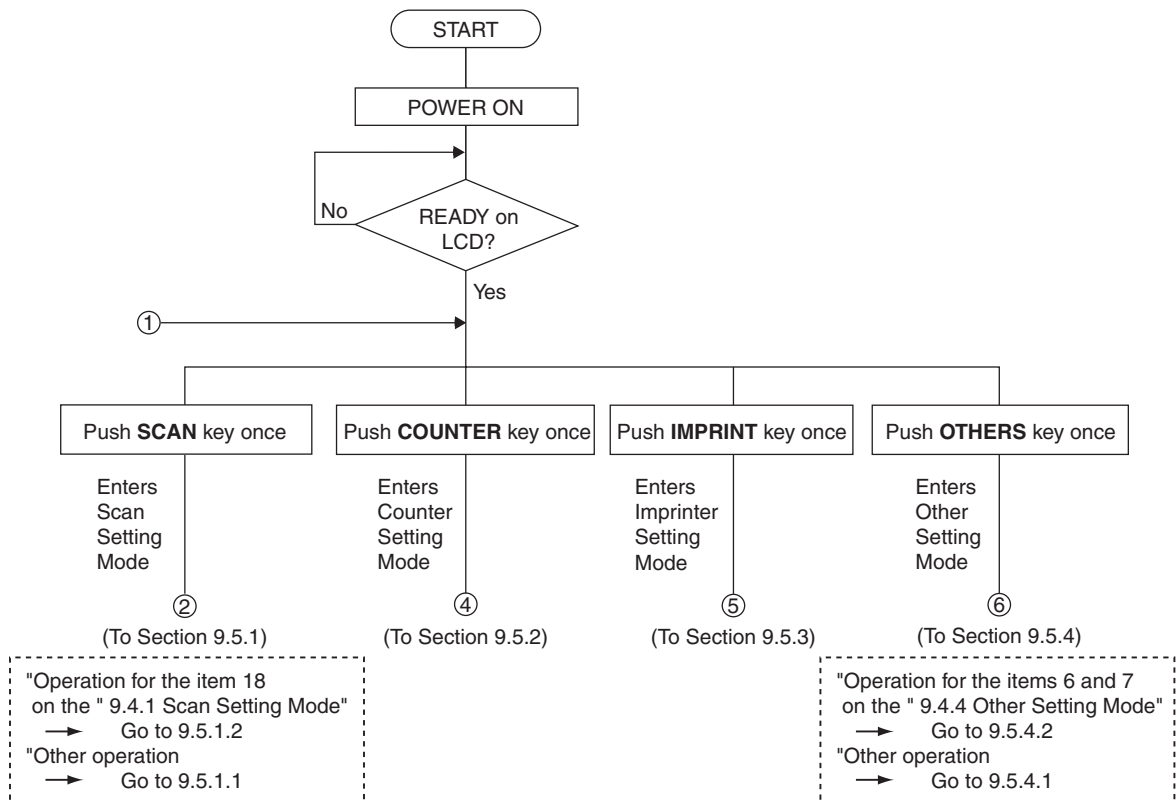
Remarks

- (1): Parameter setting by user
- (2): Status Indication
- (3): Parameter setting by service-man
- (4): Adjustment
- (5): Diagnostics

Note

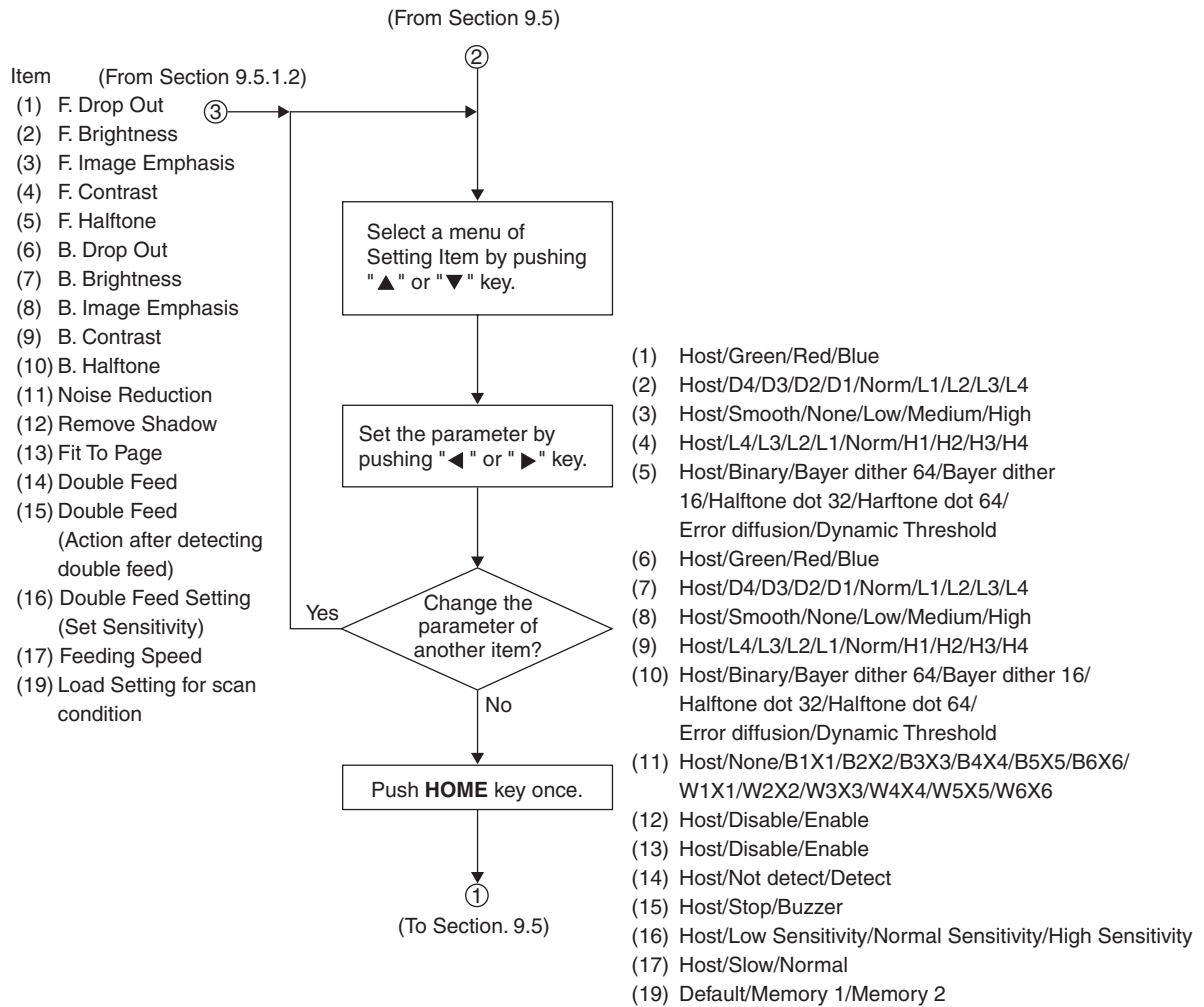
- *1 : Execute this operation only in case “EEPROM Error” (F34) occurs.
- *2 : This content can be seen only in case an additional DIMM has been mounted on the INTERFACE Board.

9.5. Setting Operation (Normal Mode)

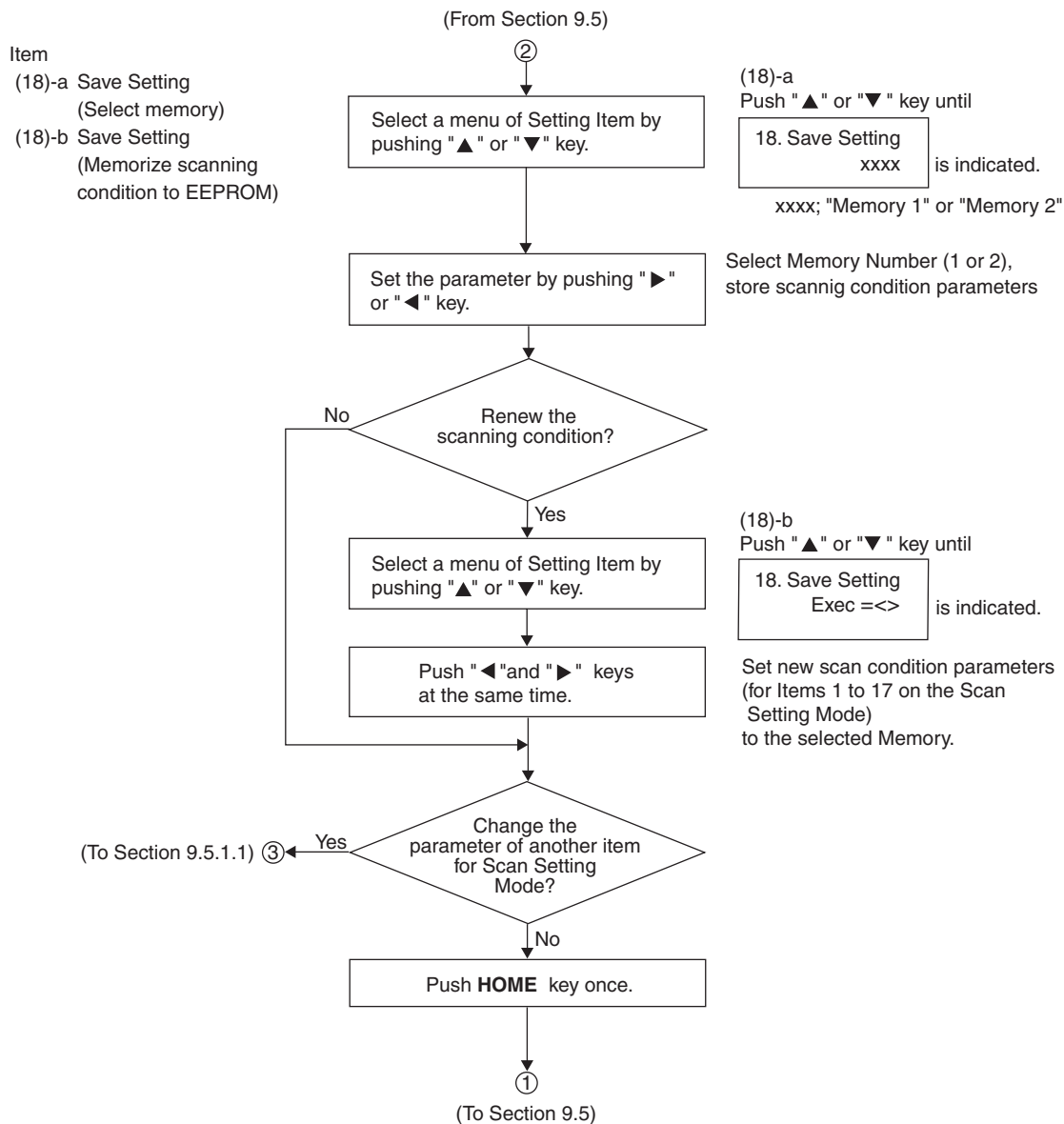


9.5.1. Scan Setting Mode (Normal Mode 1)

9.5.1.1. Mode - 1



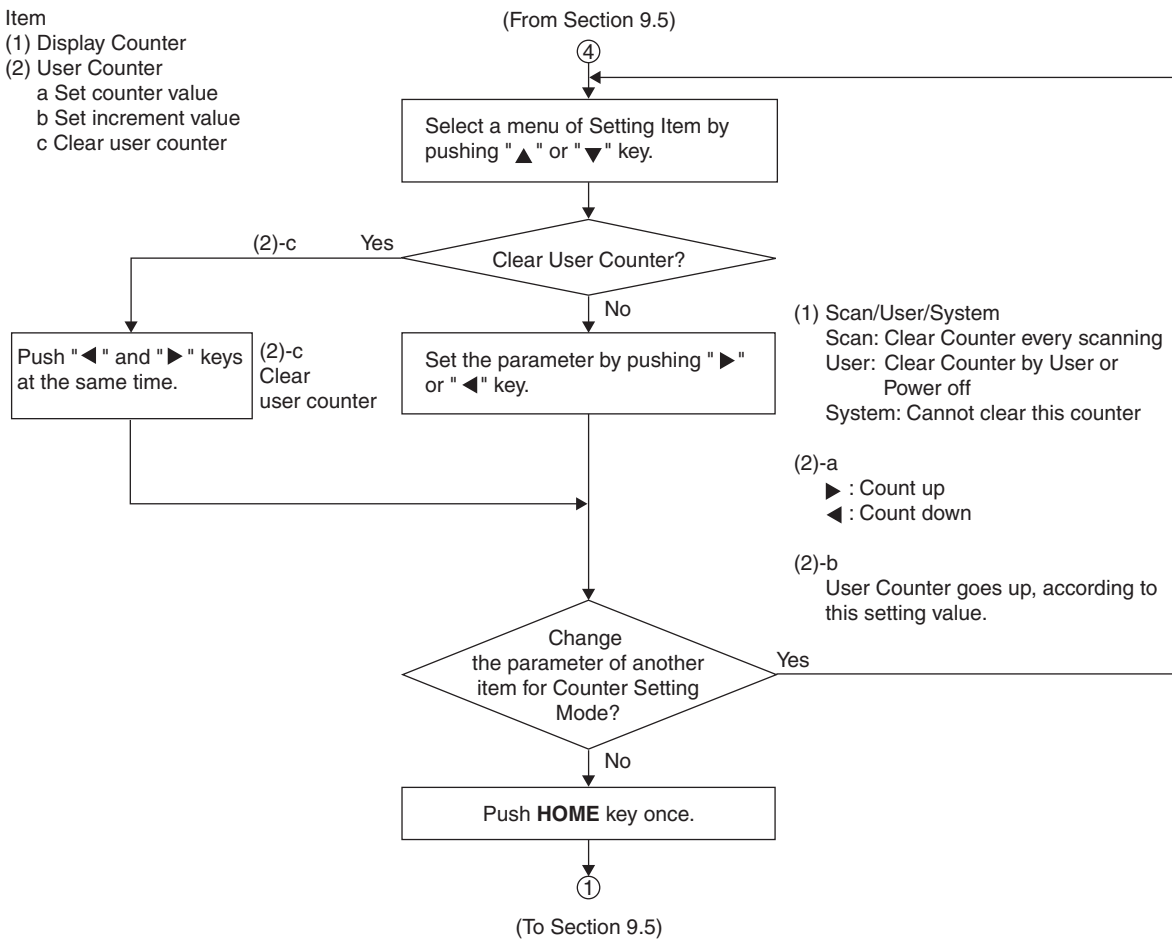
9.5.1.2. Mode - 2



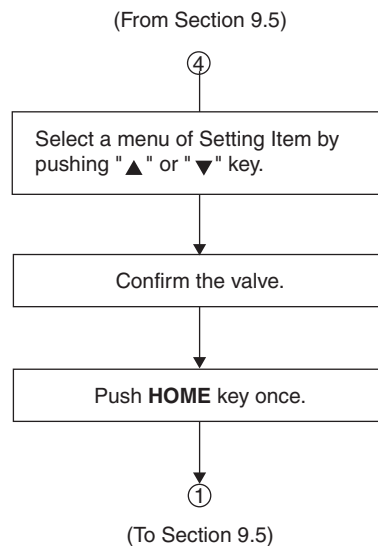
9.5.2. Counter Setting Mode (Normal Mode 2)

Item

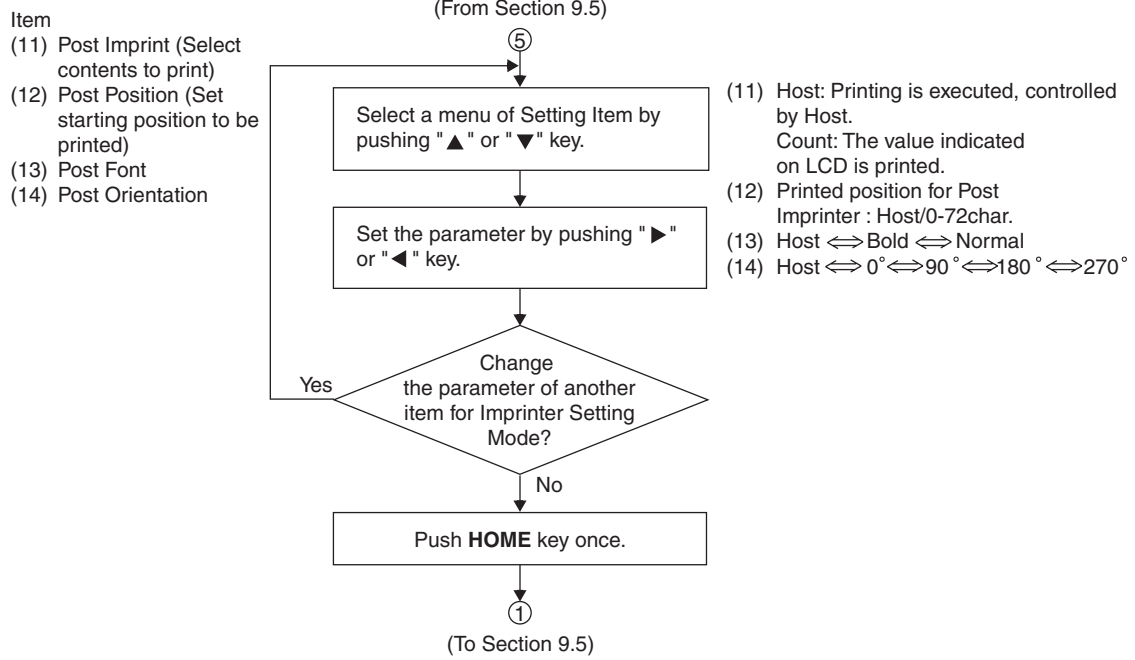
- (1) Display Counter
 (2) User Counter
 a Set counter value
 b Set increment value
 c Clear user counter



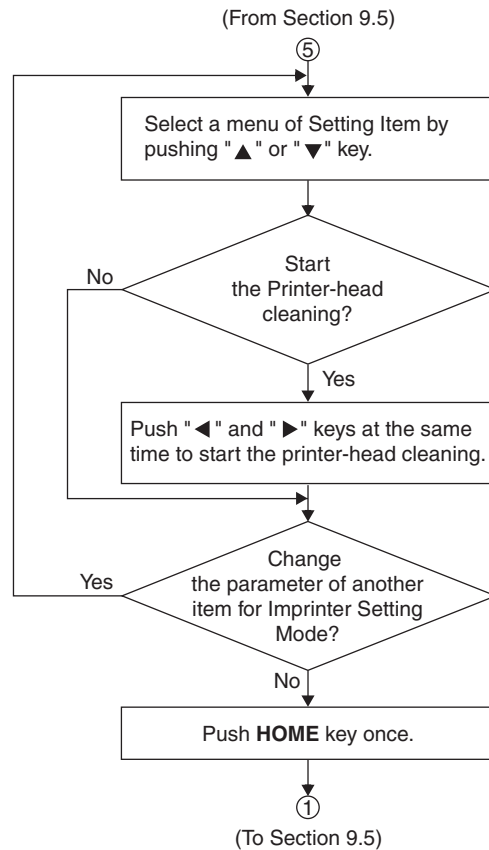
(3) System Counter



9.5.3. Imprinter Setting Mode (Normal Mode 3: Option)

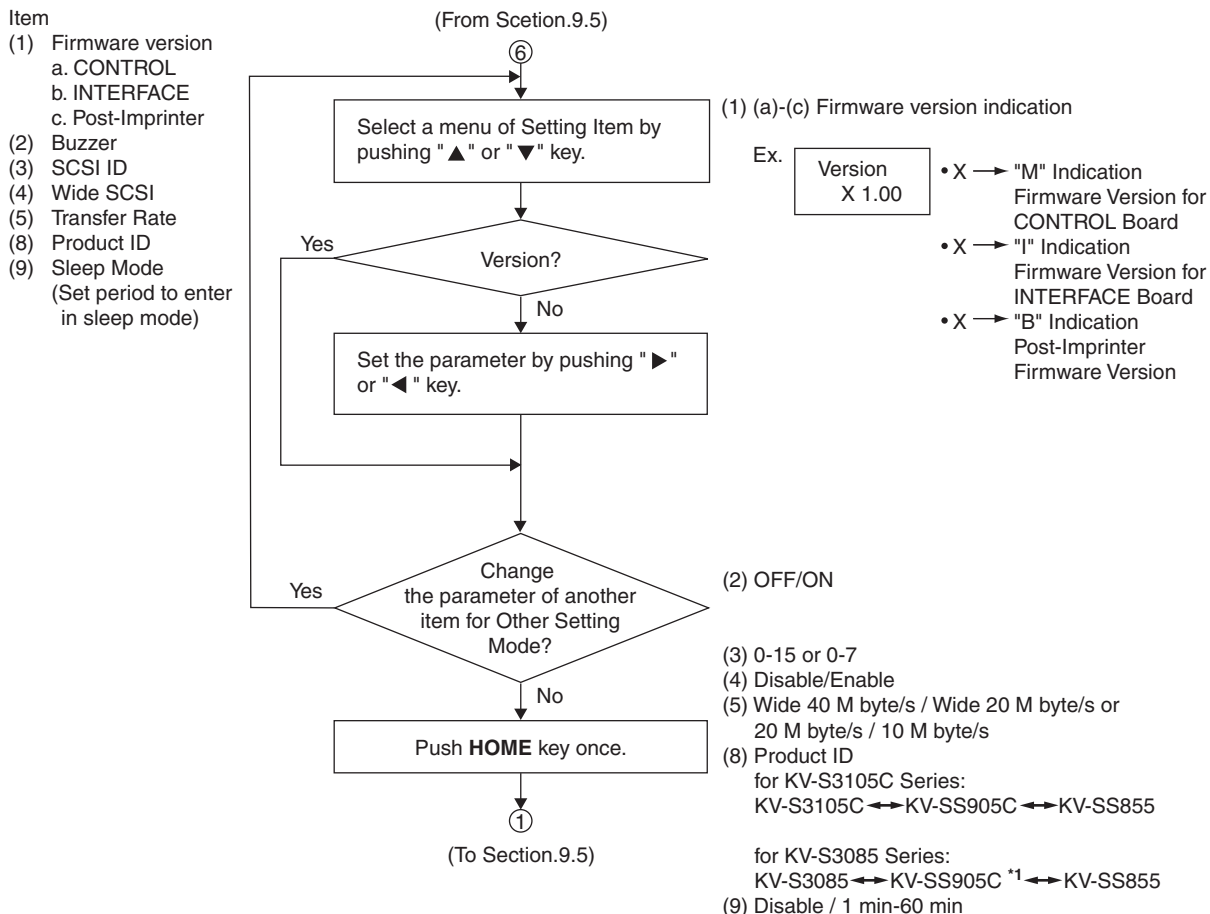


(15) Post Cleaning



9.5.4. Other Setting Mode (Normal Mode 4)

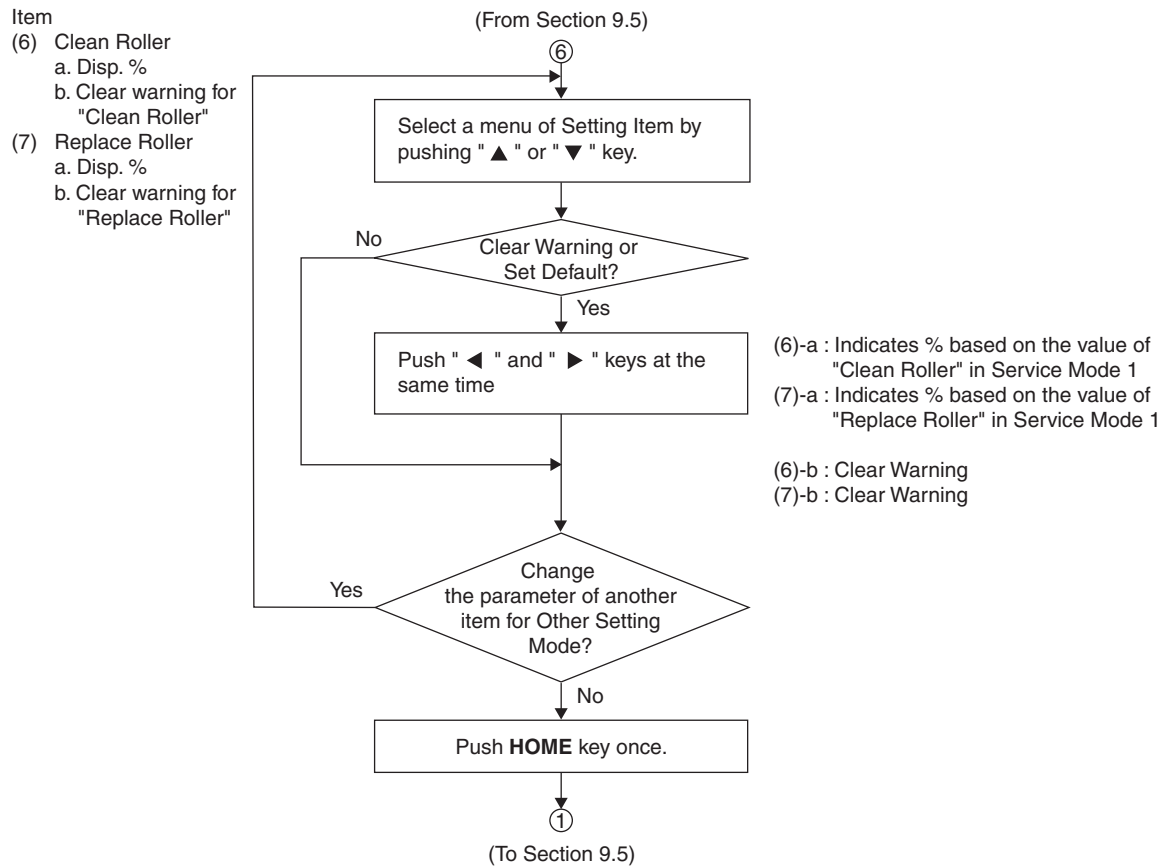
9.5.4.1. Mode - 1



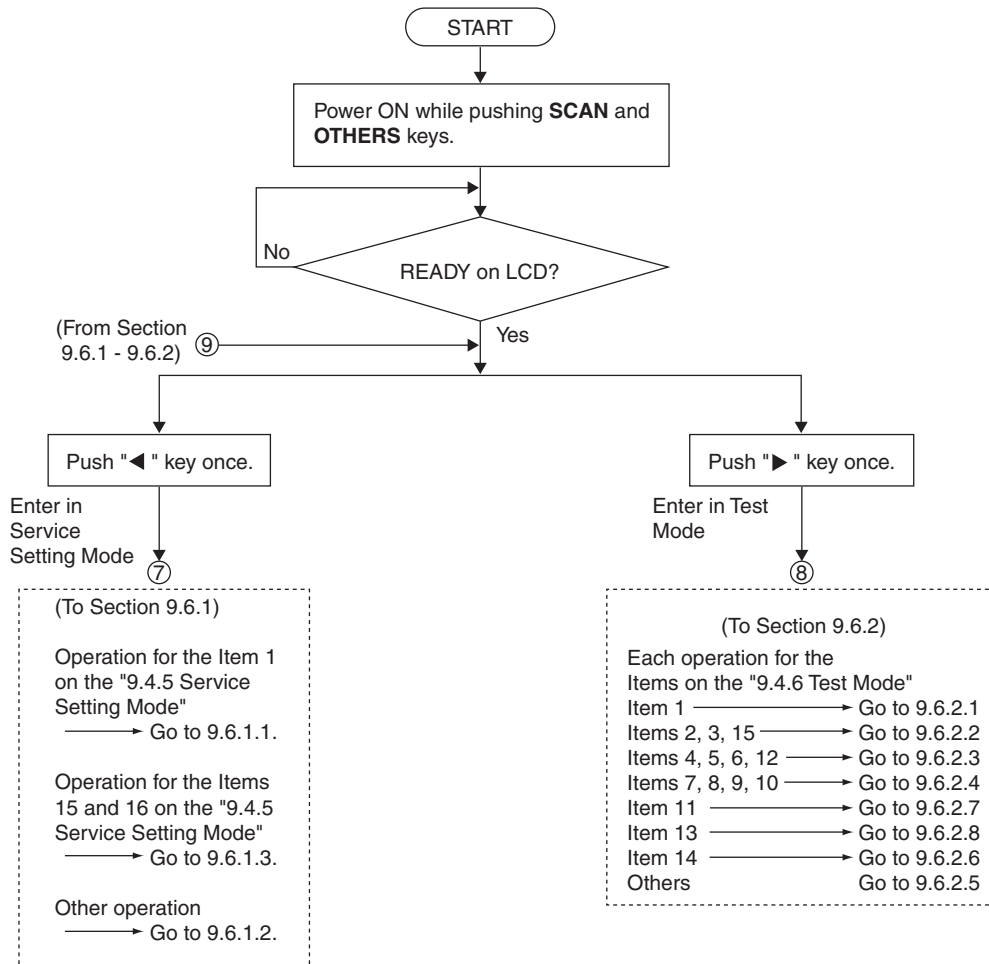
Note: *1

This content "KV-SS905C" will be selectable only in case the optional "Color upgrade kit" has been installed in scanner KV-S3085 Series.

9.5.4.2. Mode - 2

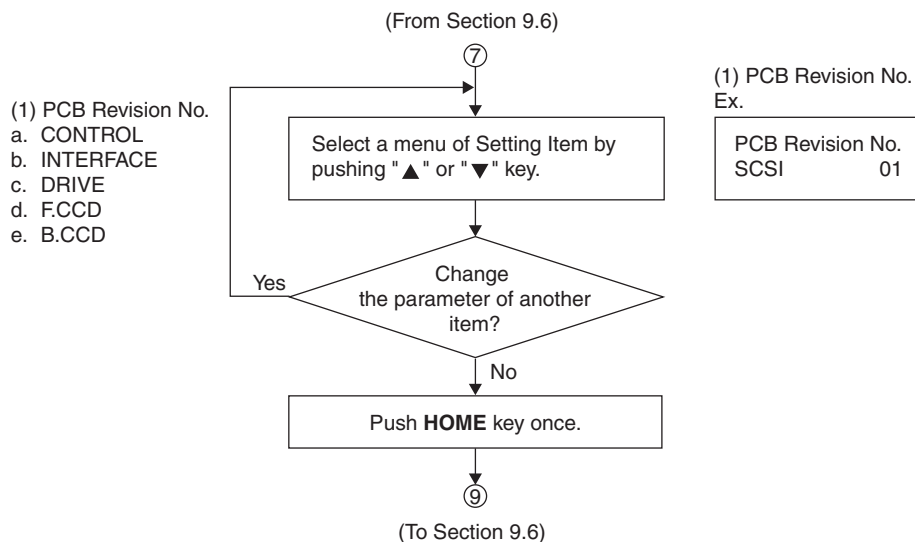


9.6. Setting Operation (Service Mode)

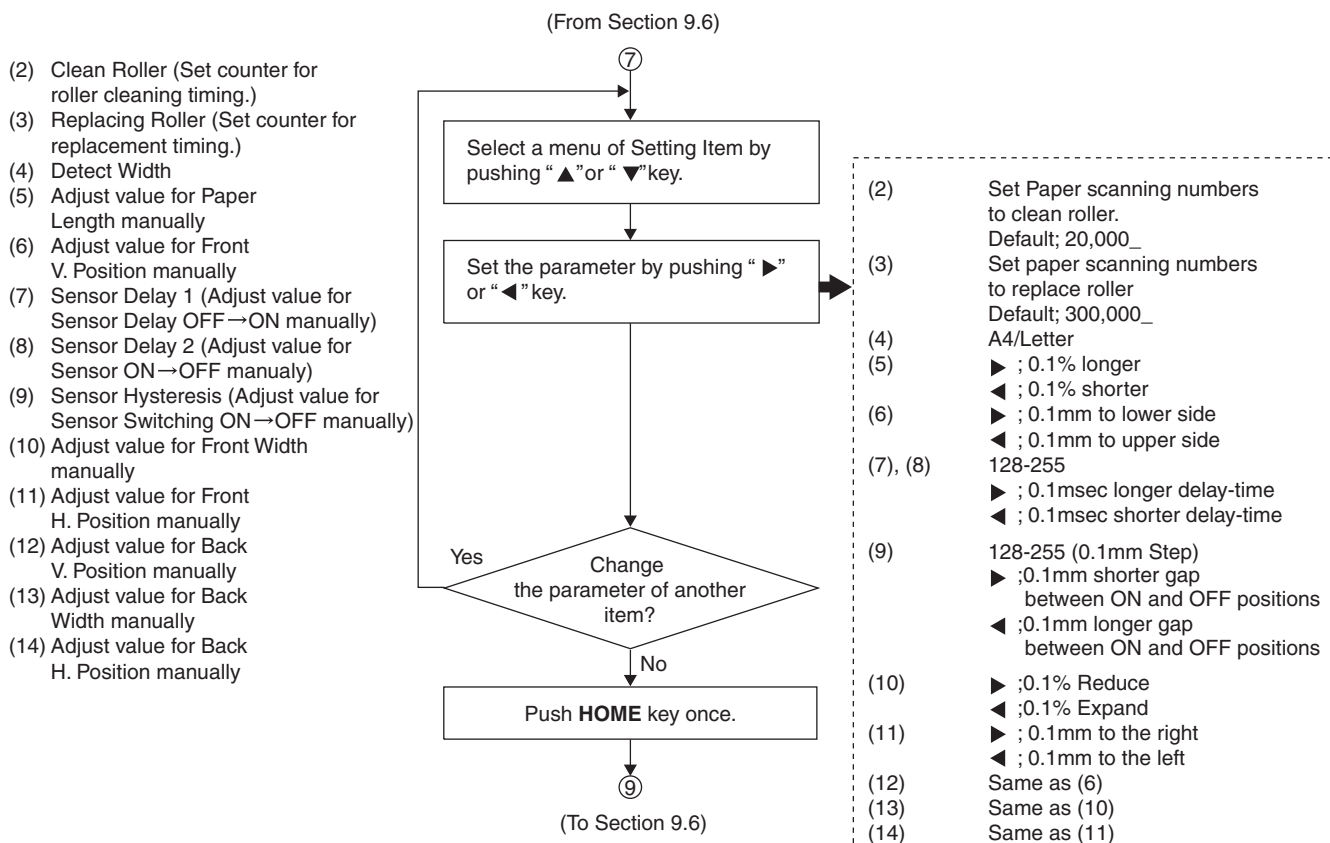


9.6.1. Service Setting Mode (Service Mode 1)

9.6.1.1. Mode - 1



9.6.1.2. Mode - 2



Note

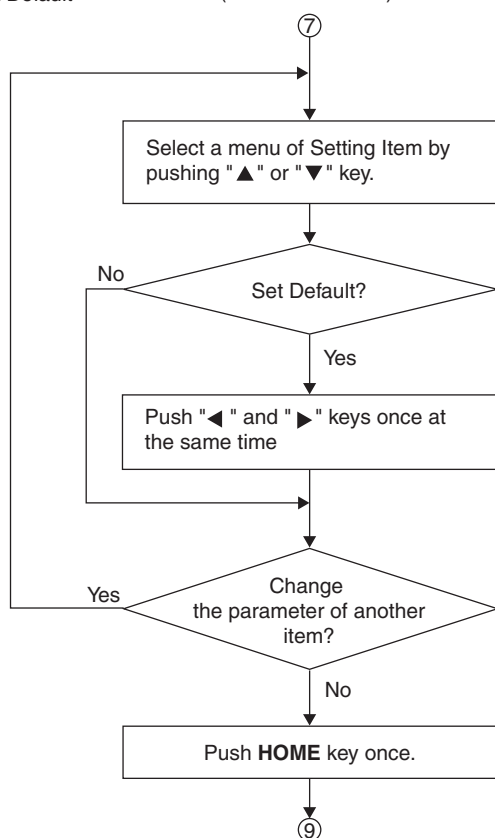
***Execute the Item (5) "Adjust value for Paper Length manually" before Items (6) "Adjust value for Front V. Position manually" and (12) "Adjust value for Back V.Position manually".**

***Execute the Item (10) "Adjust value for Front Width manually" before Item (11) "Adjust value for Front H. Position manually" and (14) "Adjust value for Back H. Position manually".**

9.6.1.3. Mode - 3

(15) Set Default

(From Section 9.6)



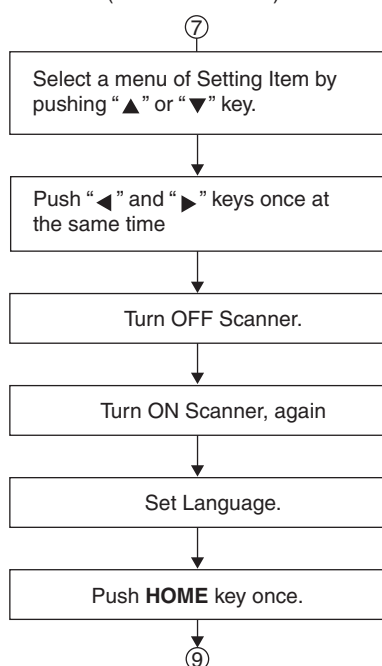
(To Section 9.6)

Pushing "◀" and "▶" keys changes setting on LCD into default except for the following contents.

- SCSI ID 0-7 or 0-15
- System Counter
- Adjust value for scanning position
- Language on LCD
- Double Feed (Set detection level)
- Transfer Rate
- Sensor Delay (Adjust value for Sensor Delay manually)

(16) Reset Language

(From Section 9.6)



(To Section 9.6)

By operating this, Item 4 "Detect Width" (A4 or Letter) is set at the same time.

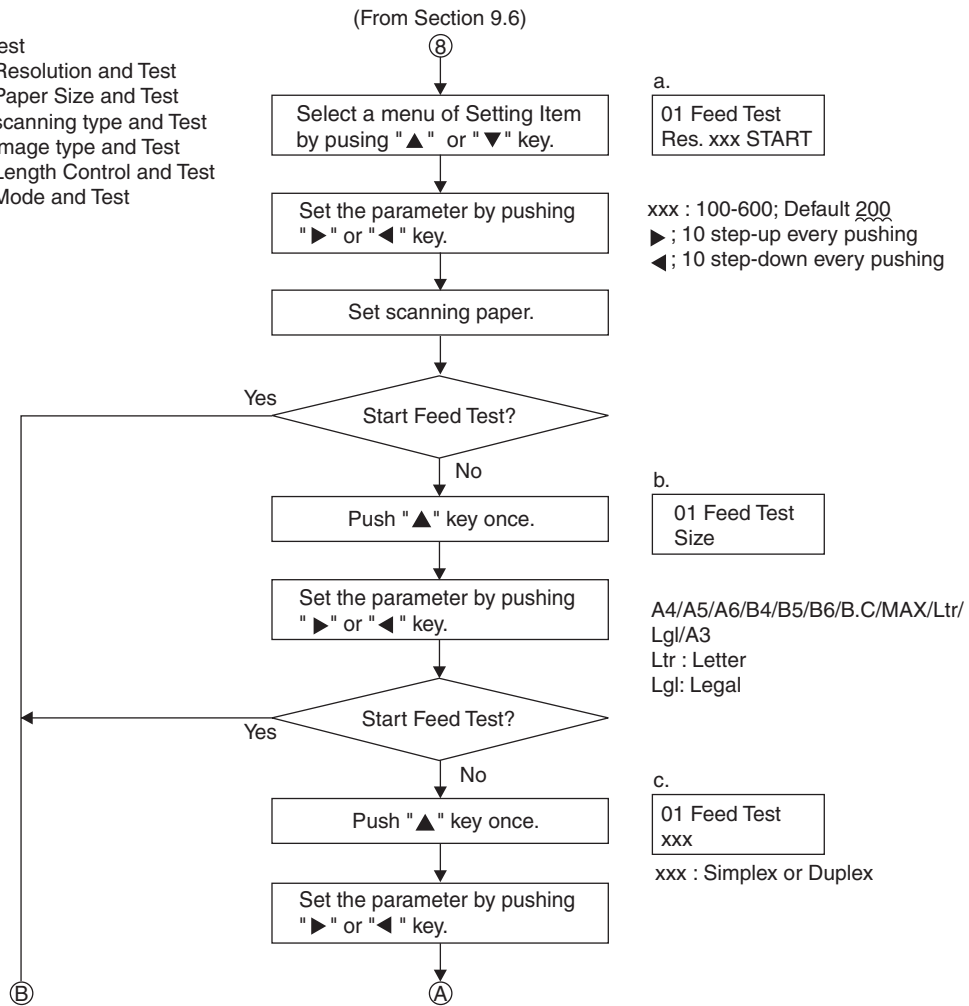
Note: This operation will be available in case of changing language setting on LCD.

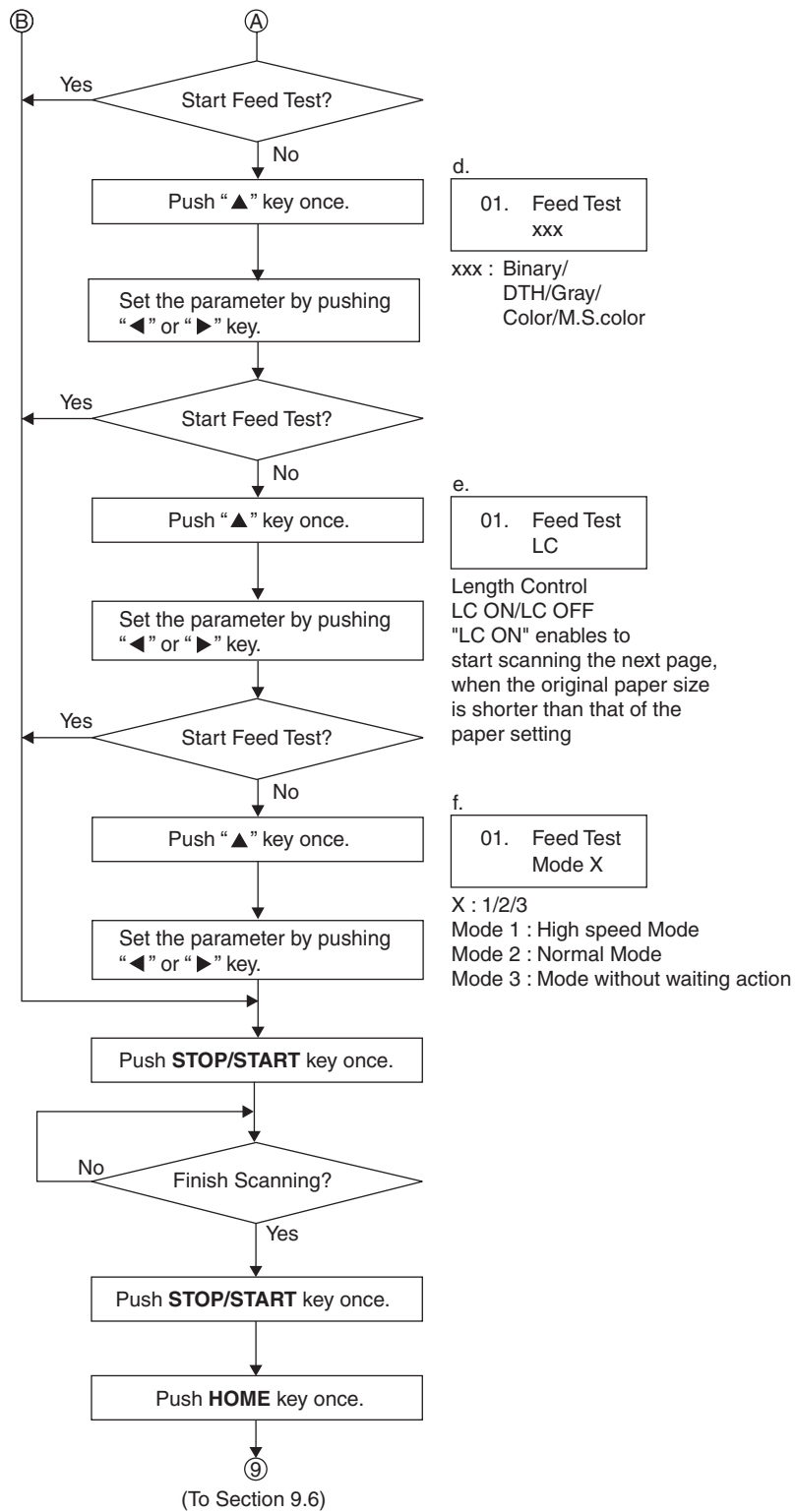
9.6.2. Test Mode (Service Mode 2)

9.6.2.1. Mode - 1

(1) Feed Test

- a. Set Resolution and Test
- b. Set Paper Size and Test
- c. Set scanning type and Test
- d. Set image type and Test
- e. Set Length Control and Test
- f. Set Mode and Test



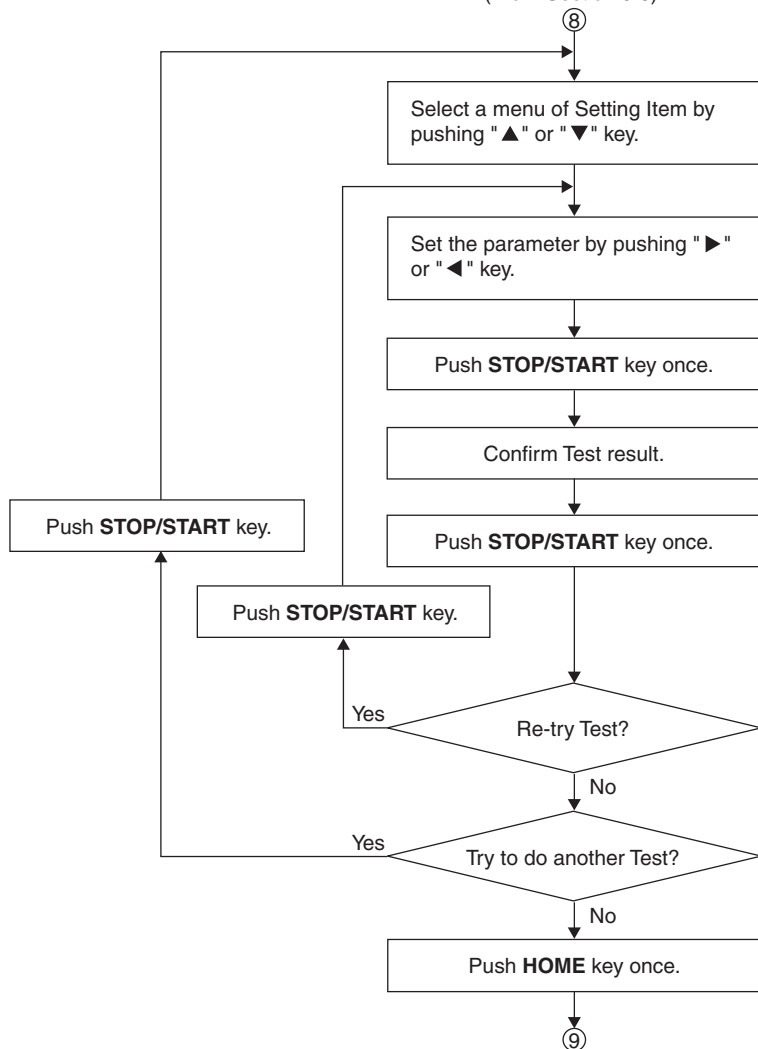


9.6.2.2. Mode - 2

- (2)-a : CCD Test (F.Lamp)
- (2)-b : CCD Test (Set gain for F0 Amp)
- (2)-c : CCD Test (Set gain for F1 Amp and test)
- (2)-d : CCD Test (B.Lamp)
- (2)-e : CCD Test (Set gain for B0 Amp and test)
- (2)-f : CCD Test (Set gain for B1 Amp and test)
- (3) : CCD Black Level
- (15) : Double Feed Test

(Check double feed sensitivity
after setting input-level.)

(From Section 9.6)



(2)-a, d

Input value	Good results
14	200 or more
OFF	100 or less

* **Note:** Before executing (2)-a, or (2)-d, input values for (2)-b, (2)-c, (2)-e, (2)-f should be all "80". And, also turn the reference plate to the white side.

(3)

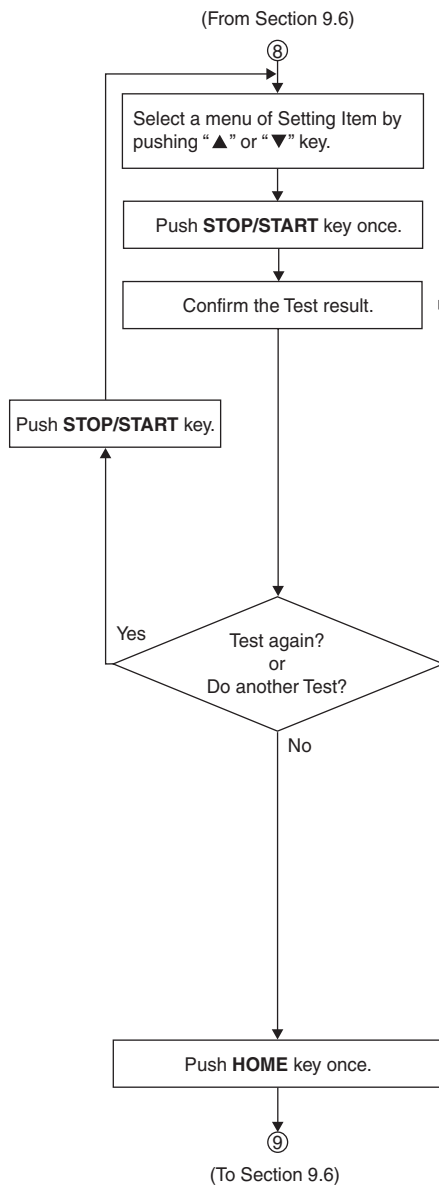
Input value	Good results
No setting	Except for 127 or 255

(15)

Input value	Good results
120	800 or more
40	400 or less

9.6.2.3. Mode - 3

- (4) Document Sensor
(Check each document sensor condition.)
- (5) Document Sensor Sensitive Level
- (6) Door & Home Sensor
- (12)-a Memory Test (CONTROL)
- (12)-b Memory Test (IMAGE)
- (12)-c Memory Test (DIMM)



(4)

P	W	L	R	S	J	E	e	l	r	1	2	3	4	5					
1	0	1	0	1	1	0	1	0	0	0	0	0	0	0					

P : Status of Paper Detector
 W : Status of Waiting Sensor
 L : Status of Skew [L] Sensor
 R : Status of Skew [R] Sensor
 S : Status of Starting Position Sensor
 J : Status of Paper Jam Sensor
 E : Status of Exit [Front] Sensor
 e : Status of Exit [Rear] Sensor
 l : Status of Edge Limit [L] Sensor
 r : Status of Edge Limit [R] Sensor

* When this status value is "1", it means the paper is in this scanner.

	1	2	3	4	5
A3	0	0	0	0	0
B4	1	0	0	0	0
A4 (letter)	1	1	0	0	0
	0	1	0	0	0
B5	0	1	1	0	0
A5	0	0	1	0	0
B6	0	0	1	1	0
A6	0	0	0	1	0
	0	0	0	1	1
BC	0	0	0	0	1

Note * Each sensor position
⇒ Refer to see. 5.3

(5)

P	W	L	R	S	J	E	e	l	r	1	2	3	4	5					
x	3	3	3	3	3	3	x	3	3	x	x	x	x	x					

P, e, 1, 2, 3, 4, 5, : (X:No range) : Neglect this information.
 W : Status of Waiting Sensor : Range 0-A (A:Darker)
 L : Status of Skew [L] Sensor : Range 0-A (A:Darker)
 R : Status of Skew [R] Sensor : Range 0-A (A:Darker)
 S : Status of Starting Position Sensor : Range 0-A (A:Darker)
 J : Status of Paper Jam Sensor : Range 0-A (A:Darker)
 E : Status of Exit [Front] Sensor : Range 0-A (A:Darker)
 l : Status of Edge Limit [L] Sensor : Range 0-A (A:Darker)
 r : Status of Edge Limit [R] Sensor : Range 0-A (A:Darker)

(6)

F	B	T						H	B	P		R							
0	1	0						0	1	0		0							

F : Status of Front Door
 B : Status of Back Door
 T : Status of Post Imprinter Door

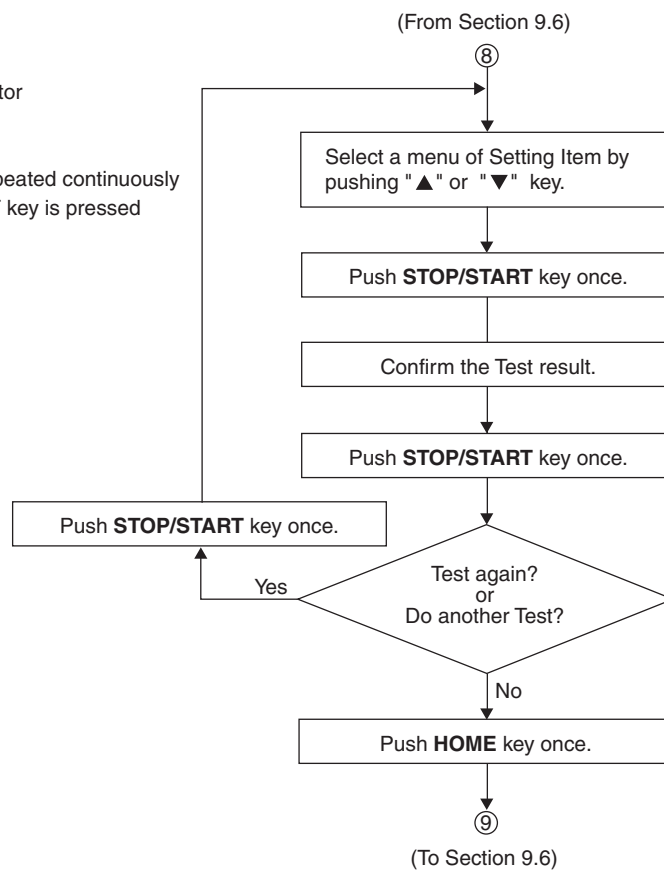
Door (opened)	F	B	T
Front Door (F)	1	1	0
Post Imprinter Door (T)	0	0	1
Back Door (B)	0	1	0

H : Status of Hopper Sensor (Upper) position (Value "1" : Upper position)
 B : Status of Hopper Sensor (Lower) position (Value "1" : Lower position)
 P : Status of Pointer Detector (Value "0" means straight-pass mode.)
 R : Status of Retard Roller Position (Value "1" means Retard position is released)

(12) : No Error or Error Message

9.6.2.4. Mode - 4

- *(7) Hopper Test
- *(8) Conveyor Motor
- *(9) Feed Motor
- (10) Aging
- *The test will be repeated continuously until STOP/START key is pressed

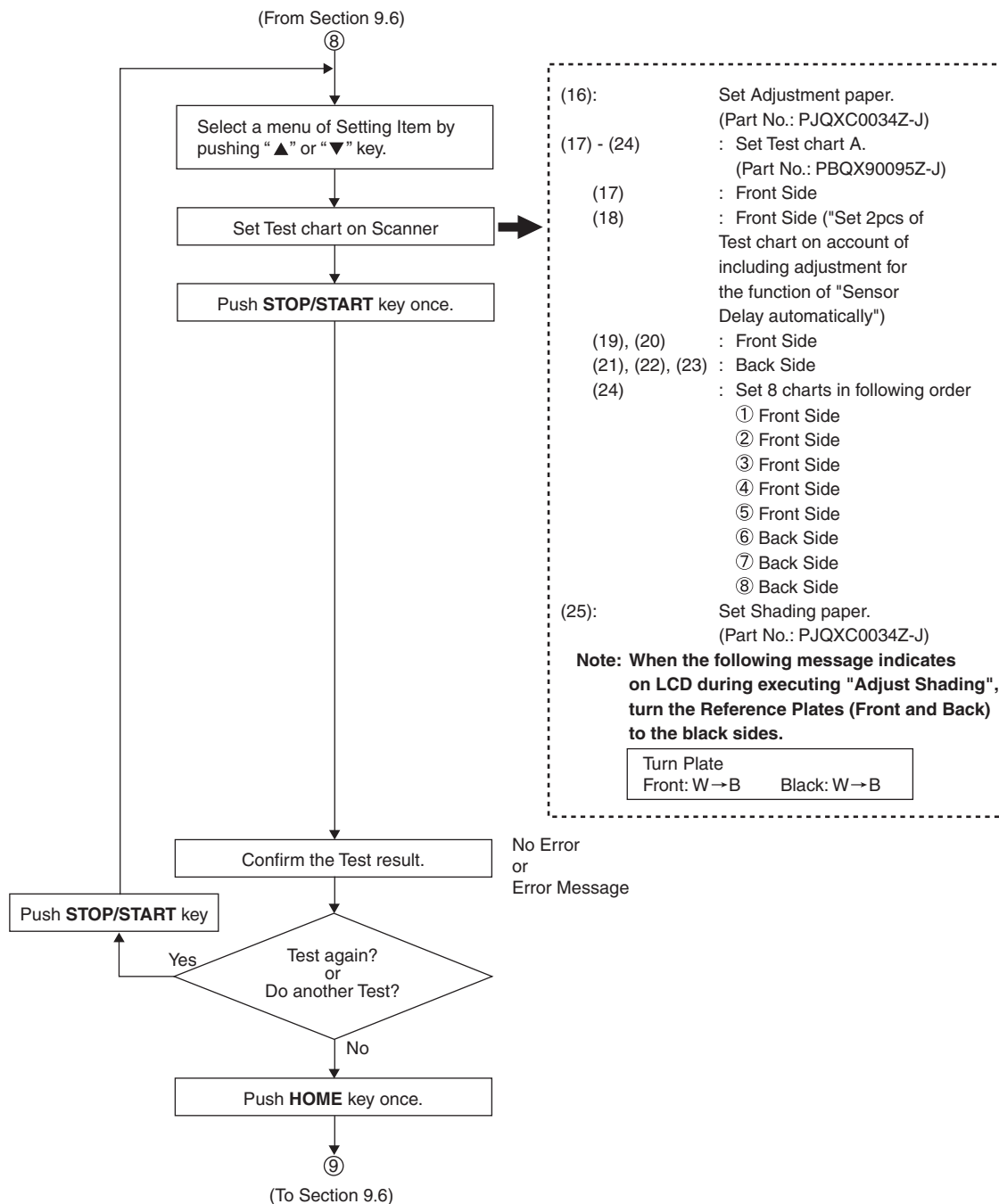


9.6.2.5. Mode - 5

- (16) Adjust Double Feed Detector
- (17) Adjust Length automatically
- (18) Adjust Front V. Position automatically
- (19) Adjust Front Width automatically
- (20) Adjust Front H. Position automatically
- (21) Adjust Back V. Position automatically
- (22) Adjust Back Width automatically
- (23) Adjust Back H. Position automatically
- (24) Adjust All Position & Length automatically
- (25) Adjust Shading

Note:

1. Before adjusting shading, be sure to clean the scanning glasses, reference plate, rollers, and sensors shown on Sec 7.2. to 7.4..
2. Before adjusting shading, be sure to check both Reference Plates (Front and Back) face to the white sides.
(In case of the black sides, turn the Reference Plates according to 6.7..)



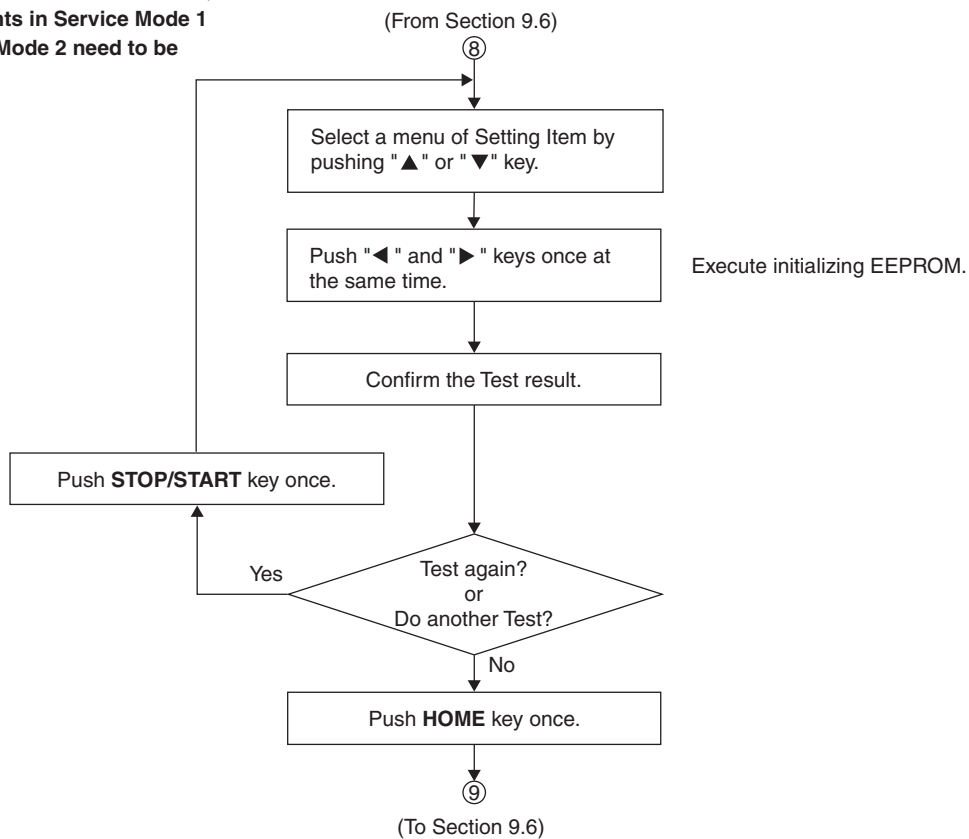
9.6.2.6. Mode - 6

(14) Init. EEPROM

*Please be very careful, as this test operation initializes all data.

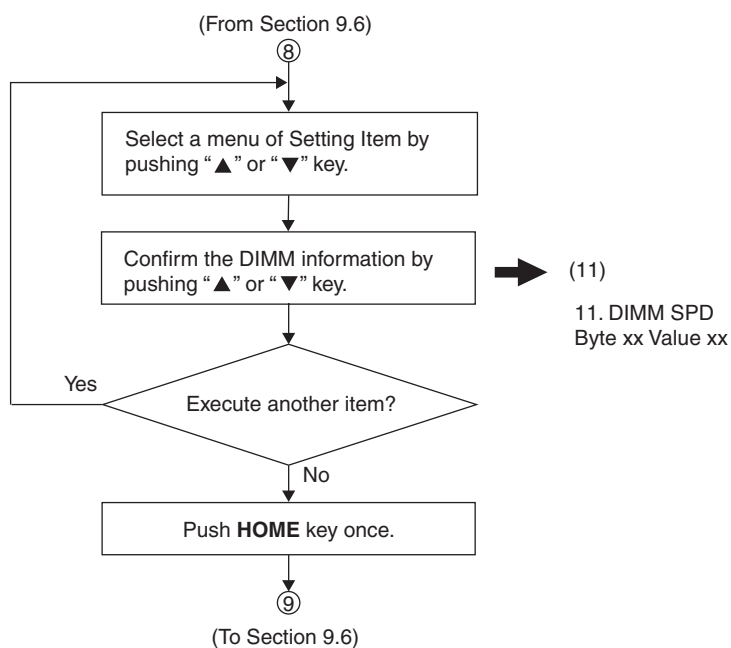
Note:

- Only perform "Init. EEPROM" when EEPROM Error (F34) occurs.
- When "Init. EEPROM" is executed, all adjustments in Service Mode 1 and Service Mode 2 need to be confirmed.

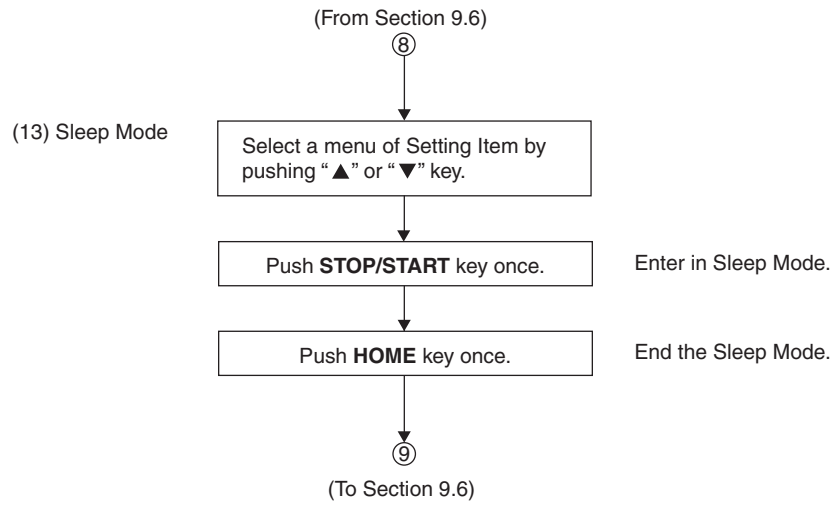


9.6.2.7. Mode - 7

(11) DIMM SPD (Serial Presence Detect) Information
DIMM SPD (Information)



9.6.2.8. Mode - 8



9.6.3. Error Code

Error Code Outline	
ST1	Error contents
0x	Communication error
1x	Paper jam error
2x	Door open error
3x	Mechanical function error
4x	Paper (Document) sensor error
5x	Scanning error
6x	Mechanical sensor error
7x	—
8x	Hardware error
9x	Hardware error
Ax	—
Bx	—
Cx	—
Dx	—
Ex	—
Fx	—

Table 9-1

Error code outline					
	Contents		Contents		Contents
U1x	Document	H1x		F1x	Hardware
U2x	Document	H2x		F2x	Hardware
U3x	Door	H3x		F3x	Hardware
U4x	Other	H4x	Lamp	F4x	Mechanical issue
U5x		H5x		F5x	Sensor
U6x		H6x		F6x	Scanning
U7x		H7x		F7x	Sensor
U8x		H8x		F8x	
U9x		H9x		F9x	Hardware

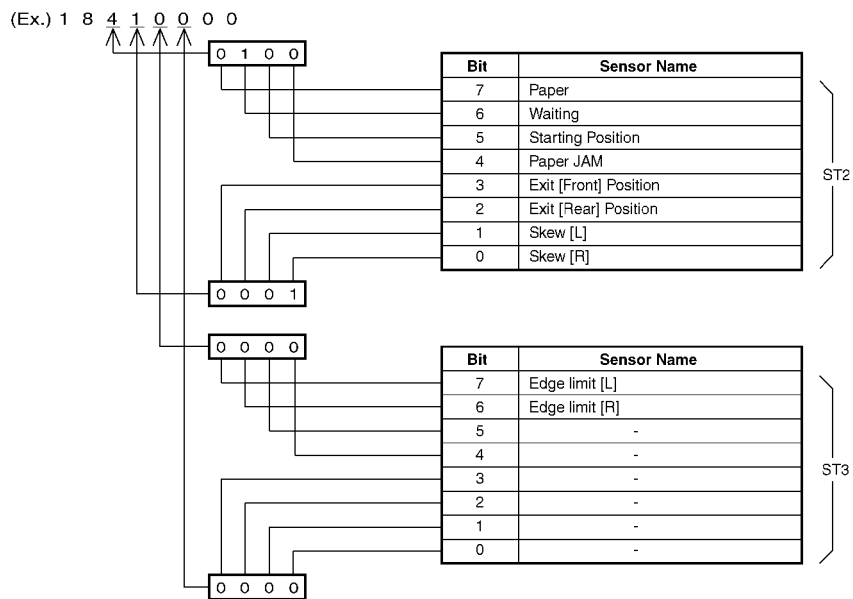
Table 9-2

Classified Code	ST1	ST2	ST3	ST4	Contents
U10	10	00	00	00	No document
U11	11	x	00	00	Paper Feed Jam: ST2 shows the rest numbers (approx.) of paper.
U12	12	x	00	00	Jam1 (around conveyor): ST2 shows the rest numbers (approx.) of paper.
U13	13	x	00	00	Jam2 (around conveyor): ST2 shows the rest numbers (approx.) of paper.
U14	14	x	00	00	Jam3 (around conveyor): ST2 shows the rest numbers (approx.) of paper.
U15	15	x	00	00	Jam4 (around conveyor): ST2 shows the rest numbers (approx.) of paper.
U16	16	x	00	00	Jam1 (around Exit Roller): ST2 shows the rest numbers (approx.) of paper.
U17	17	x	00	00	Jam2 (around Exit Roller): ST2 shows the rest numbers (approx.) of paper.
U18 *1	18	x	00	00	Paper remain in scanner *(ST2: Paper position information)
U20	19	00	00	00	Skew error
U23	1C	x	x	00	Double feed error (ST2: Sensor information) (ST3:0=Document at Waiting Sensor 1=No document at Waiting Sensor 2=Length 3=Supersonic frequency)
U30	20	00	00	00	Front door open
U32	21	00	00	00	Back door open
U34	22	00	00	00	Post imprinter door open
U41	58	00	00	00	Scanning position adjustment error
U50	A0	00	00	00	No INTERFACE Board
H40	54	x	x	00	Front side lamp lighting error (ST2: Lighting value ST3: AD input level)
H41	55	x	x	00	Back side lamp lighting error (ST2: Lighting value ST3: AD input level)
F10	80	00	00	00	Program ROM (on CONTROL Board) error
F11	81	x	x	x	Work RAM (on CONTROL Board) error (ST2: Data ST3,4: Address)
F17	87	00	00	00	IMAGE MEMORY error
F18	88	00	00	00	DIMM error
F20	8A	x	x	x	Front side shading RAM error (ST2: Data ST3,4: Address)
F21	8B	x	x	x	Front side line RAM error (ST2: Data ST3,4: Address)
F32	96	00	00	00	SCSI IC error
F33	97	00	00	00	USB IC error
F34	98	00	00	00	EEPROM error
F36	9A	00	00	00	Front side GA-SEN error
F37	9B	00	00	00	GA-IMG error
F38	9C	00	00	00	Back side GA-SEN error

Classified Code	ST1	ST2	ST3	ST4	Contents
F39	9D	00	00	00	FPGA error
F40	30	00	00	00	Hopper drive (Lower) error
F42	32	00	00	00	Hopper drive (Upper) error
F50	40	00	00	00	Waiting sensor error
F51	41	00	00	00	Starting position sensor error
F52	42	00	00	00	Skew (R) sensor error
F53	43	00	00	00	Skew (L) sensor error
F54	44	00	00	00	Paper jam sensor error
F55	45	00	00	00	Exit (front) position sensor error
F56	46	00	00	00	Exit (rear) position sensor error
F57	48	00	00	00	Edge Limit (R) sensor error
F58	49	00	00	00	Edge Limit (L) sensor error
F60	50	00	00	00	Front side gain error
F62	52	00	00	00	Back side gain error
F70	47	x	00	00	Size sensor error (ST2: Information for exit tray guide's position)
F80	60	x	x	00	Double feed sensor error (ST2: Output level ST3: Input level)
F90	AA	x	x	x	Back side shading RAM error (ST2: Data ST3,4: Address)
F91	AB	x	x	x	Back side line RAM error (ST2: Data ST3,4: Address)

Note

U18 *1 Paper Position Information



In this case, the Waiting sensor and Skew [R] sensor detect the paper

9.7. Service Utility

9.7.1. Main menu indication for Service Utility

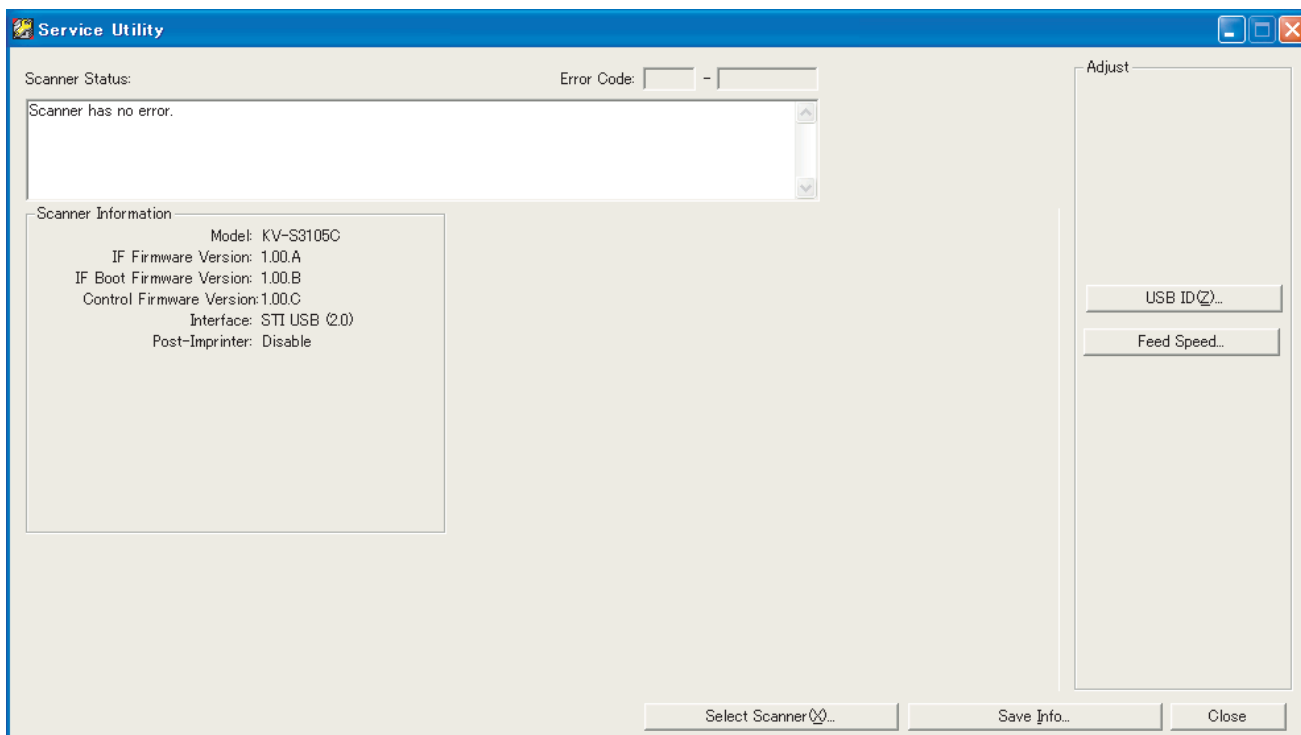
This section describes the functions of the service utility software, such as USB setting and other that are not included in LCD operation. (Service mode only)

Executing "**Service Utility.exe**" (without installing the software to the PC except for ASPI Manager) will allow you to operate all the functions found in this service utility software.

(On the other hand, installation of the device driver in the accessory CD-ROM will be needed to install.)

Note:

- This utility software is not included with the scanner.
Please call service of technical support to obtain the utility software.
- This software should be used only by an authorized service technician.
Improper use of this software may cause damage to the scanner.



* Fig.9.7.1 Main Menu

Note:

- This is a main menu sample (Fig.9.7.1) of the Service Utility software (Version 3.20).
- This software is the latest version at the time when this service manual is issued, but it is subject to change without notice.

9.7.2. Function item list of Service Utility

Service Utility item list is as follows.

Note:

When two or more scanners are connected to PC, execute “Select Scanner” to define the scanner before evaluating. The procedure is as follows.

1. Click “Select Scanner” on the Main Menu.
2. Select the product number and interface of the scanner to evaluate.

Item		Purpose	* Remarks
Adjust	USB ID.	To set a USB ID. for the scanner, connected to PC	(3)
	Feed Speed	To reduce the motor speed for document feed	(4)
Other	Save Information	To save scanner and PC information as a log file	(3)

*Remarks

- (1) Parameter setting by user
- (2) Status indication
- (3) Parameter setting by service person
- (4) Adjustment
- (5) Diag.
- (6) Maintenance

9.7.3. Operation on PC

Item	Operation	Default	Remarks
* USB ID	1. Click “ USB ID ” on the main menu to enter in the USB ID dialog box.	—	* This setting is available for a new CONTROL Board, or for a CONTROL Board with EEPROM initialized.
	2. Click “ Set ” on “ USB ID ” dialog box to store a new ID number for a CONTROL Board replaced or initialized.		
	3. Click “ Close ” to go back the main menu.		
Feed Speed	1. Click “ Feed Speed ” on the main menu to enter in the Feed Speed dialog box.	2000	
	2. Set a new value (PPS: 500 to 2000).		
	3. Click “ OK ” to change the motor maximum speed for document feed to go back to the main menu. (Without changing, click “ Cancel ” to go back to the main menu)		
Save Info.	1. Click “ Save Info ” on the main menu.	—	
	2. Save scanner and PC information as a log file, according to the guidance on PC.		

10 TROUBLE SHOOTING

10.1. Warning

Warning message on LCD	Possible Cause	Check point
C l e a n R o l l e r	The rollers are dirty.	Clean the rollers.
R e p l a c e R o l l e r	The rollers need to be replaced.	Replace the paper feed roller module and retard roller module.
D o u b l e F e e d O c c u r r e d	Refer to Classified Code "U23".	Refer to Classified Code "U23".
R e p l a c e F r o n t L a m p	Lamp (Front) needs to be replaced.	Replace the lamp.
R e p l a c e B a c k L a m p	Lamp (Back) needs to be replaced.	Replace the lamp.
R e p l a c e B o t h L a m p s	Lamp (Front) and Lamp (Back) need to be replaced.	Replace both lamps.
C l e a n F . S e n s o r P l a t e	The surface of the Reference Plate (Front) is dirty.	Clean the surface. (See 7.3.)
C l e a n B . S e n s o r P l a t e	The surface of the Reference Plate (Back) is dirty.	Clean the surface. (See 7.3.)
C l e a n S e n s o r P l a t e	The surfaces of the Reference Plate (Front) and Reference Plate (Back) are dirty.	Clean the surfaces. (See 7.3.)
F 7 0 C a l l S e r v i c e	Size sensor or its surrounding circuit has some problems.	Refer to Classified Code "F70".

10.2. Error Code

Classified Code	Error Code	Possible Cause	Check point
U10: No document	10 00 00 00	The document is not loaded on the hopper properly.	Load the document correctly.
		The sensor cannot detect the document as it is curled.	Straighten the document and load it again.
		Paper Detector does not work properly.	Execute Document Sensor according to 9.6.2.3 and check "P" status.
U11: Paper feed jam	11 xx 00 00	The document is jammed.	Open the front door and remove the jammed paper. Then clean all of the rollers.
		The paper sensor is dirty.	Clean the paper sensor.
		Waiting Sensor does not work properly.	Execute Document Sensor according to 9.6.2.3 and check "W" status.
U12: Jam 1 (around conveyor)	12 xx 00 00	The document is jammed.	Open the front door and remove the jammed paper. Then clean all of the rollers.
		The paper sensor is dirty.	Clean the paper sensor.
		Starting Position Sensor does not work properly.	Execute Document Sensor according to 9.6.2.3 and check "S" status.
U13: Jam 2 (around conveyor)	13 xx 00 00	The document is jammed.	Open the back door and remove the jammed paper. Then clean all of the rollers.
		The paper sensor is dirty.	Clean the paper sensor.
		Paper Jam Sensor or Pointer Detector does not work properly.	1. Paper Jam sensor Execute Document Sensor according to 9.6.2.3 and check "J" status. 2. Pointer Detector Execute Door & Home Sensor according to 9.6.2.3 and check "P" status.
U14: Jam 3 (around conveyor)	14 xx 00 00	The document is jammed.	Open the front door and remove the jammed paper. Then clean all of the rollers.
		The paper sensor is dirty.	Clean the paper sensor.
		Exit [Front] sensor does not work properly.	Execute Document Sensor according to 9.6.2.3 and check "E" status.

Classified Code	Error Code	Possible Cause	Check point
U15: Jam 4 (around conveyor)	15 xx 00 00	The document is jammed.	Open the back door and remove the jammed paper. Then clean all of the rollers.
		The paper sensor is dirty.	Clean the paper sensor.
		Exit [Rear] sensor or Pointer Detector does not work properly.	1. Exit [Rear] sensor Execute Document Sensor according to 9.6.2.3 and check "e" status. 2. Pointer Detector Execute Door & Home Sensor according to 9.6.2.3 and check "P" status.
U16: Jam 1 (around Exit roller)	16 xx 00 00	The document is jammed.	Open the front door and remove the jammed paper. Then clean all of the rollers.
		The paper sensor is dirty.	Clean the paper sensor.
		Exit [Front] sensor does not work properly.	Execute Document Sensor according to 9.6.2.3 and check "E" status.
U17: Jam 2 (around Exit roller)	17 xx 00 00	The document is jammed.	Open the back door and remove the jammed paper. Then clean all of the rollers.
		The paper sensor is dirty.	Clean the paper sensor.
		Exit [Rear] sensor does not work properly.	Execute Document Sensor according to 9.6.2.3 and check "e" status.
U18: Paper remain in scanner	18 xx 00 00	A document remains in the scanner.	Open the front and/or back doors, and remove all of the remaining documents.
		Dust adheres to the paper sensor.	Clean the paper sensor.
		Foreign matter is lodged around the paper sensor.	Remove the foreign matter.
		Exit [Front] sensor or Paper Jam sensor or Exit [Rear] sensor does not work properly.	Execute Document Sensor according to 9.6.2.3 and check "E" or "J" or "e" status.
U20: Skew error	19 xx xx 00	1. Document on the Hopper Tray is not set correctly.	Set the document on the Hopper Tray, sliding the Document guides on both sides, according to the document size. And execute scanning again.
		2. Front Door is not closed firmly.	Close the door surely.
		3. A roller (Paper Feed, Separation, Retard, Drive, Conveyor, Front Exit, Straight Exit) is dirty.	1. Clean the roller (See 7.2.) 2. Execute "Clean Roller" (Clean warning for "Clean Roller"). → See 9.4 and 9.5.
		4. A roller (Paper Feed, Separation, Retard, Drive, Conveyor, Front Exit, Straight Exit) swells irregularly.	Replace the roller. Note: After replacing Paper Feed, Separation, and Retard Rollers, execute "Replace Roller" (Clear warning for "Replace Roller"). → See 9.4 and 9.5.
		5. Paper dust exists on or around Skew (L), Skew (R), Edge Limit (L), or Edge Limit (R).	1. Blow off the dirt on the surface of the sensor with the accessory blower. (See 7.4.) 2. Execute "Document Sensor" and check the sensor condition. → See 9.4 and 9.6.
U23: Double feed error	1C xx xx 00	Multiple sheets were fed into the unit.	Open the front door and remove the jammed paper.
		The rollers are dirty.	Clean all of the rollers.
		The rollers need to be replaced.	Replace the paper feed roller module or the retard roller module.
		Double Feed Detector does not work properly.	Execute " Adjust Double Feed Detector " in 9.6.2.5 with adjustment paper.
U30: Front door open	20 00 00 00	The front door is open.	Close the front door.
		The front door switch was broken.	Execute " Door & Home Sensor " in 9.6.2.3 to check "F" or "B" or "T" or "L" status.
U32: Back door open	21 00 00 00	The back door is open.	Close the back door.
		The back door switch was broken.	Execute " Door & Home Sensor " in 9.6.2.3 to check "F" or "B" or "T" or "L" status.
U34: Post-imprinter (TOP) door	22 00 00 00	The post-imprinter door is open.	Close the post-imprinter door.
		The post-imprinter door sensor was broken.	Execute " Door & Home Sensor " in 9.6.2.3 to check "F" or "B" or "T" or "L" status.

Classified Code	Error Code	Possible Cause	Check point
U41: Adjustment error	58 00 00 00	Error on the scanning-position adjustment occurred.	1. Check whether the adjustment paper is designated by manufacturer. 2. Check whether the direction of the adjustment paper is correct. 3. Check whether the adjustment paper or glasses at the scanning position are dirty. And clean them. 4. Clean rollers related to conveyor the paper. (Paper Feed, Separation, Retard, Drive, Conveyor)
U50: No I/F Board	A0 00 00 00	No INTERFACE Board is provided to the scanner.	1. Check whether INTERFACE Board is inserted to the scanner properly. 2. Replace the INTERFACE Board. 3. Replace MOTHER Board.
H40: Front side lamp lighting error	54 xx xx 00	Front side lamp lighting error occurs.	1. Check the front side lamp lights properly. 2. Check the front side lamp is installed to front side lamp module properly. 3. Confirm each cable and connector condition as follows. a. Between the front side lamp and CN2 on LAMP INVERTER Board b. Between CN1 on the LAMP INVERTER Board and CN2026 on MOTHER Board c. Between Front Side Optical Unit and CN2005 on the MOTHER Board d. Between Front Side Optical Unit and CN2002 on the MOTHER Board e. Between Front Side Optical Unit and CN1002 on CONTROL Board 4. Replace faulty cables. 5. Replace the front side lamp. 6. Replace the front lamp module. 7. Replace the LAMP INVERTER Board. 8. Replace front side optical unit. 9. Replace the CONTROL Board.
H41: Back side lamp lighting error	55 xx xx 00	Back side lamp lighting error occurs.	1. Check the back side lamp lights properly. 2. Check the back side lamp is installed to back side lamp module properly. 3. Confirm each cable and connector condition as follows. a. Between the back side lamp and CN3 on LAMP INVERTER Board b. Between CN1 on the LAMP INVERTER Board and CN2026 on MOTHER Board c. Between Back Side Optical Unit and CN2004 on the MOTHER Board d. Between Back Side Optical Unit and CN2002 on the MOTHER Board e. Between Back Side Optical Unit and CN1003 on CONTROL Board 4. Replace faulty cables. 5. Replace the back side lamp. 6. Replace the back lamp module. 7. Replace the LAMP INVERTER Board. 8. Replace back side optical unit. 9. Replace the CONTROL Board.
F10: Program ROM (on CONTROL Board) error	80 00 00 00	The result of check-sum for Program ROM (IC1060) on the CONTROL Board is faulty.	1. Check the soldering condition for IC1053 and IC1060 on the CONTROL Board 2. Replace Program ROM (IC1060) on the CONTROL Board. 3. Replace the CONTROL Board.

Classified Code	Error Code	Possible Cause	Check point
F11: Work RAM (on CONTROL Board) error	81 xx xx xx	Verify error for the Work RAM (IC1062) on the CONTROL Board occurs.	1. Check the soldering condition for IC1053 and IC1062 on the CONTROL Board. 2. Replace the CONTROL Board.
F17: Image Memory (on INTERFACE Board) error	87 00 00 00	DRAM verify error occurs.	1. Check the soldering condition for IC3029 and IC3030 on the INTERFACE Board. 2. Check the soldering condition for IC3000 and CN3001 on the INTERFACE Board. 3. Replace the INTERFACE Board.
F18: DIMM (on INTERFACE Board) error	88 00 00 00	DIMM on CN3001 verify error occurs.	1. Check whether the DIMM module is attached correctly. 2. Check whether the DIMM module is in spec. for this scanner. 3. Check the soldering condition for IC3000 and CN3001 on the INTERFACE Board. 4. Replace the DIMM module on the INTERFACE Board. 5. Replace the INTERFACE Board.
F20: Front Side Shading RAM (on CONTROL Board) error	8A xx xx xx	Front Side Shading RAM's (IC 1014, IC1018) verify error occurs on the CONTROL Board.	1. Check the soldering condition for IC1011, IC1012, IC1014, IC1018, and IC1071 on the CONTROL Board. 2. Replace the CONTROL Board.
F21: Front Side Line RAM (on CONTROL Board) Error	8B xx xx xx	Front Side Line RAM's (IC1024, IC1025, IC1026, IC1030, IC1032) verify error occurs on the CONTROL Board.	1. Check the soldering condition for IC1012, IC1024, IC 1025, IC1026, IC1030 and IC1032 on the CONTROL Board. 2. Replace the CONTROL Board.
F32: SCSI IC (on INTERFACE Board) error	96 00 00 00	SCSI IC (IC3023) error occurs.	1. Check the soldering condition for the IC3014, IC3023, IC3024, IC3025, IC3026 on the INTERFACE Board. 2. Replace the INTERFACE Board.
F33: USB IC (on INTERFACE Board) error	97 00 00 00	USB IC (IC3027) error occurs.	1. Check the soldering condition for the IC3027 on the INTERFACE Board. 2. Replace the INTERFACE Board.
F34: EEPROM error (on CONTROL Board) error	98 00 00 00	The result of check-sum for EEPROM (IC1050) on the CONTROL Board is faulty.	1. Check the soldering condition for the IC1012 and IC1050 on the CONTROL Board. 2. Replace the CONTROL Board.
F36: Front Side GA-SEN (on CONTROL Board) error	9A 00 00 00	Front side GA-SEN (Gate array: IC 1012) error occurs on the CONTROL Board.	1. Check the soldering condition for the IC1012 on the CONTROL Board. 2. Replace the CONTROL Board.
F37: GA_IMG (on INTERFACE Board) error	9B 00 00 00	GA-IMG (Gate array: IC 3000) error occurs on the INTERFACE Board.	1. Check the soldering condition for the IC3000 on the INTERFACE Board. 2. Replace the INTERFACE Board. 3. Replace MOTHER Board. 4. Replace CONTROL Board.
F38: Back Side GA-SEN (on CONTROL) error	9C 00 00 00	Back Side GA-SEN (Gate array: IC 1013) error occurs on the CONTROL Board	1. Check the soldering condition for the IC1013 on the CONTROL Board. 2. Replace the CONTROL Board.
F39: FPGA IC (on INTERFACE Board) error	9D 00 00 00	CPU could not download data to the FPGA (IC3002) correctly.	1. Check the following soldering condition on the INTERFACE Board. a. 41 st , 42 nd , and 125 th pins on IC3029 b. Q3002, R3218, R3220 c. 92 nd , 103 rd , and 104 th pins on the IC3002 d. R3021, R3031 2. Replace the INTERFACE Board.

Classified Code	Error Code	Possible Cause	Check point
F40: Hopper drive (Lower) error	30 00 00 00	Hopper drive (Lower) error	1. To confirm Hopper Sensor operates properly, execute Door & Home Sensor Test in Test Mode. 2. Is the hopper position shifted to the lower by operating Hopper Test in Test mode? 3. Does Hopper Motor rotate? 4. Confirm each cable and connector condition as follows. a. Between Hopper Motor and CN2013 on MOTHER Board b. Between CN2011 on the MOTHER Board and CN6014 on HOPPER [POSITION] Board c. Between CN4000 and CN2008 5. 1st pin on the CN6014: More than 4.5 V (DC)? 6. Replace faulty cables. 7. Replace the HOPPER [POSITION] Board 8. Replace the Hopper Motor. 9. Replace DRIVE Board. 10. Replace the MOTHER Board.
F42: Hopper drive (Upper) error	32 00 00 00	Hopper drive (Upper) error occurs.	1. To confirm Hopper Sensor operates properly, execute Door & Home Sensor Test in Test Mode. 2. Is the hopper position shifted to the upper by operating Hopper Test in Test mode? 3. Does Hopper Motor rotate? 4. Confirm each cable and connector condition as follows. a. Between the Hopper Motor and CN2013 on MOTHER Board b. Between CN2011 on the MOTHER Board and CN6014 on HOPPER [POSITION] Board c. Between CN6004 on the HOPPER [POSITION] Board and CN6002 on HOPPER [ANGLE] Board d. Between CN4000 and CN2008 5. 4th pin on the CN6002: More than 4.5 V (DC)? 6. Replace faulty cables. 7. Replace the HOPPER [ANGLE] Board. 8. Replace the HOPPER [POSITION] Board. 9. Replace the Hopper Motor. 10. Replace DRIVE Board. 11. Replace the MOTHER Board.

Classified Code	Error Code	Possible Cause	Check point
F50: Waiting sensor error	40 00 00 00	Waiting sensor error occurs.	1. To confirm the waiting sensor operates properly, execute Document Sensor Test and Sensor Sensitive Level in Test Mode. 2. Remove paper dust around the sensor. 3. Confirm each cable and connector condition as follows. a. Between CN6020 on SKEW [L] Board and CN6010 on RELAY [UPPER] Board. b. Between CN6012 on the RELAY [UPPER] Board and CN2014 on MOTHER Board. c. Between CN1001 and CN2001. 4. 5th pin on CN6030: More than 4.5 V (DC)? 5. Replace the SKEW [L] Board. 6. Replace the RELAY [UPPER] Board. 7. Replace the MOTHER Board. 8. Replace CONTROL Board.
F51: Starting position sensor error	41 00 00 00	Starting position sensor error occurs.	1. To confirm the starting position sensor operates properly, execute Document Sensor Test and Sensor Sensitive Level in Test Mode. 2. Remove paper dust around the sensor. 3. Confirm each cable and connector condition as follows. a. Between CN6020 on SKEW [L] Board and CN6010 on RELAY [UPPER] Board b. Between CN6012 on the RELAY [UPPER] Board and CN2014 on MOTHER Board c. Between CN1001 and CN2001 4. 5th pin on the CN6020: More than 4.5 V (DC)? 5. Replace the SKEW [L] Board. 6. Replace the RELAY [UPPER] Board. 7. Replace the MOTHER Board. 8. Replace CONTROL Board.
F52: Skew (R) sensor error	42 00 00 00	Skew (R) sensor error occurs.	1. To confirm the skew (R) sensor operates properly, execute Document Sensor Test and Sensor Sensitive Level in Test Mode. 2. Remove paper dust around the sensor. 3. Confirm each cable and connector condition as follows. a. Between CN6023 on SKEW [R] Board and CN6010 on RELAY [UPPER] Board b. Between CN6012 on the RELAY [UPPER] Board and CN2014 on MOTHER Board c. Between CN1001 and CN2001 4. 3rd pin on the CN6023: More than 4.5 V (DC)? 5. Replace the SKEW [R] Board. 6. Replace the RELAY [UPPER] Board. 7. Replace the MOTHER Board. 8. Replace CONTROL Board.

Classified Code	Error Code	Possible Cause	Check point
F53: Skew (L) sensor error	43 00 00 00	Skew (L) sensor error occurs.	1. To confirm the skew (L) sensor operates properly, execute Document Sensor Test and Sensor Sensitive Level in Test Mode. 2. Remove paper dust around the sensor. 3. Confirm each cable and connector condition as follows. a. Between CN6020 on SKEW [L] Board and CN6010 on RELAY [UPPER] Board b. Between CN6012 on the RELAY [UPPER] Board and CN2014 on MOTHER Board c. Between CN1001 and CN2001 4. 5th pin on the CN6020: More than 4.5 V (DC)? 5. Replace the SKEW [L] Board. 6. Replace the RELAY [UPPER] Board. 7. Replace the MOTHER Board. 8. Replace CONTROL Board.
F54: Paper jam sensor error	44 00 00 00	Paper jam sensor error occurs	1. To confirm the paper jam sensor operates properly, execute Document Sensor Test and Sensor Sensitive Level in Test Mode. 2. Remove paper dust around the sensor. 3. Confirm each cable and connector condition as follows. a. Between CN6024 on JAM Board and CN6026 on RELAY [UPPER] Board b. Between CN6012 on the RELAY [UPPER] Board and CN2014 on MOTHER Board c. Between CN1001 and CN2001. 4. 1st pin on the CN6024: More than 4.5 V (DC)? 5. Replace the JAM Board. 6. Replace the RELAY [UPPER] Board. 7. Replace the MOTHER Board. 8. Replace CONTROL Board.
F55: Exit (Front) sensor error	45 00 00 00	Exit (Front) sensor error occurs.	1. To confirm the exit (Front) sensor operates properly, execute Document Sensor Test and Sensor Sensitive Level in Test Mode. 2. Remove paper dust around the sensor. 3. Confirm each cable and connector condition as follows. a. Between CN6017 on EXIT [FRONT] Board and CN2012 on MOTHER Board b. Between CN1001 and CN2001 4. 1st pin on the CN6017: More than 4.5 V (DC)? 5. Replace the EXIT [FRONT] Board. 6. Replace the MOTHER Board. 7. Replace CONTROL Board.

Classified Code	Error Code	Possible Cause	Check point
F56: Exit (Rear) sensor error	46 00 00 00	Exit (Rear) sensor error occurs.	1. To confirm the exit (Rear) sensor operates properly, execute Document Sensor Test in Test Mode. 2. Remove paper dust around the sensor. 3. Confirm each cable and connector condition as follows. a. Between the exit (Rear) sensor and CN6015 on POINTER Board b. Between CN6016 on the POINTER Board and CN2011 on MOTHER Board c. Between CN1001 and CN2001 4. 1st pin on the CN6015: More than 4.5 V (DC)? 5. Replace the exit (Rear) sensor. 6. Replace the POINTER Board. 7. Replace the MOTHER Board. 8. Replace CONTROL Board.
F57: Edge limit [R] sensor error	48 00 00 00	Edge limit [R] sensor error occurs.	1. To confirm the edge limit [R] sensor operates properly, execute Document Sensor Test and Sensor Sensitive Level in Test Mode. 2. Remove paper dust around the sensor. 3. Confirm each cable and connector condition as follows. a. Between CN6023 on SKEW [R] Board and CN6010 on RELAY [UPPER] Board b. Between CN6012 on the RELAY [UPPER] and CN2014 on MOTHER Board c. Between CN1001 and CN2001. 4. 3rd pin on the CN6023: More than 4.5 V (DC)? 5. Replace the SKEW [R] Board. 6. Replace the RELAY [UPPER] Board. 7. Replace the MOTHER Board. 8. Replace CONTROL Board.
F58: Edge limit [L] sensor error	49 00 00 00	Edge limit [L] sensor error occurs.	1. To confirm the edge limit [L] sensor operates properly, execute Document Sensor Test and Sensor Sensitive Level in Test Mode. 2. Remove paper dust around the sensor. 3. Confirm each cable and connector condition as follows. a. Between CN6020 on SKEW [L] Board and CN6010 on RELAY [UPPER] Board b. Between CN6012 on the RELAY [UPPER] Board and CN2014 on MOTHER Board c. Between CN1001 and CN2001 4. 5th pin on the CN6020: More than 4.5 V (DC)? 5. Replace the SKEW [L] Board. 6. Replace the RELAY [UPPER] Board. 7. Replace the MOTHER Board. 8. Replace CONTROL Board.

Classified Code	Error Code	Possible Cause	Check point
F60: Front side gain error	50 00 00 00	Front side gain error occurs.	1. Check front side lamp lights properly. 2. Check front side lamp is installed to front side Lamp module properly. 3. Execute CCD Test in Test Mode. Amp value is changing during this test? 4. Confirm each cable and connector condition as follows. a. Between the front side lamp and CN2 on LAMP INVERTER Board b. Between CN1 on the LAMP INVERTER Board and CN2026 on MOTHER Board c. Between Front Side Optical Unit and CN2005 on the MOTHER Board d. Between Front Side Optical Unit and CN2002 on the MOTHER Board e. Between Front Side Optical Unit and CN1002 on CONTROL Board 5. Check input level (Test pins: TPFRO, TPFRE, TPFGR, TPFGE, TPFBO, and TPFBE on the CONTROL Board) → See Note. 6. Replace faulty cables. 7. Replace the front side lamp. 8. Replace the front lamp module. 9. Replace the LAMP INVERTER Board. 10. Replace front side optical unit. 11. Replace the CONTROL Board.
F62: Back side gain error	52 00 00 00	Back side gain error occurs.	1. Check back side lamp lights properly. 2. Check back side lamp is installed to back side lamp module properly. 3. Execute CCD Test in Test Mode. Amp value is changing during this test? 4. Confirm each cable and connector condition as follows. a. Between the back side lamp and CN3 on LAMP INVERTER Board b. Between CN1 on the LAMP INVERTER Board and CN2026 on MOTHER Board c. Between Back Side Optical Unit and CN2004 on the MOTHER Board d. Between Back Side Optical Unit and CN2002 on the MOTHER Board e. Between Back Side Optical Unit and CN1003 on CONTROL Board 5. Check input level (Test pins: TPBRO, TPBRE, TPBGR, TPBGE, TPBBO, and TPBBE on the CONTROL Board). → See Note. 6. Replace faulty cables. 7. Replace the back side lamp. 8. Replace back lamp module. 9. Replace the LAMP INVERTER Board. 10. Replace back side optical unit. 11. Replace the CONTROL Board.

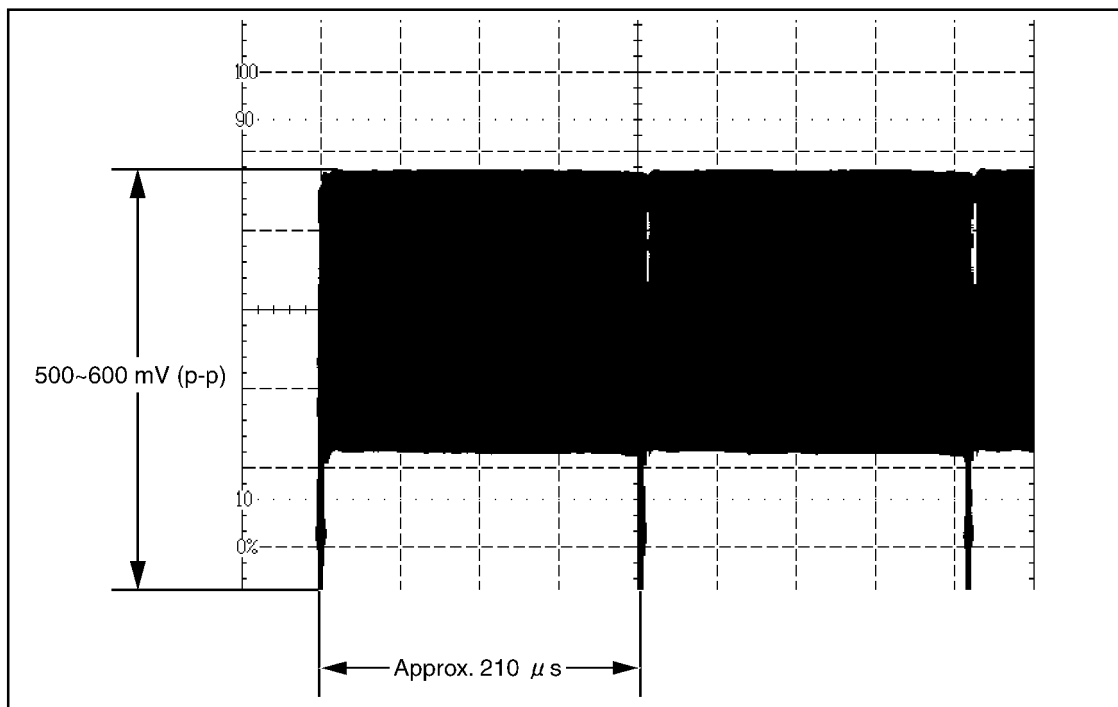
Classified Code	Error Code	Possible Cause	Check point
F70: Size sensor error	47 xx 00 00	Size sensor error occurs.	1. To confirm the size sensor operates properly, execute Document Sensor Test in Test Mode. 2. Remove paper dust around the sensor. 3. Confirm each cable and connector condition as follows. a. Between CN6013 on SIZE Board and CN6003 on HOPPER [CONNECTOR] Board b. Between CN6005 on the HOPPER [CONNECTOR] Board and CN2027 on MOTHER Board c. Between CN1001 and CN2001 4. Replace the SIZE Board. 5. Replace the HOPPER [CONNECTOR] Board. 6. Replace the MOTHER Board. 7. Replace CONTROL Board.
F80: Double feed sensor error	60 xx xx 00	Double feed sensor error occurs.	1. To confirm double feed detector operates properly, execute Double Feed Test in Test Mode. 2. Remove paper dust around the sensor. 3. Confirm each cable and connector condition as follows. a. Between Double Feed Detector [Generate] and CN6007 on RELAY [LOWER] Board b. Between CN6018 on the RELAY [LOWER] Board and CN2011 on MOTHER Board c. Between CN2014 on the MOTHER Board and CN6012 on RELAY [UPPER] Board d. Between CN6011 on the RELAY [UPPER] Board and Double Feed Detector (Receive) 4. Adjust double feed detector in Test Mode. 5. Replace the Double Feed Detector (Generate). 6. Replace the RELAY [LOWER] Board. 7. Replace the Double Feed Detector (Receive). 8. Replace the RELAY [UPPER] Board. 9. Replace the MOTHER Board. 10. Replace CONTROL Board.
F90: Back Side Shading RAM(on CONTROL Board) error	AA xx xx xx	Back Side Shading RAM's (IC1019, IC1023) verify error occurs on the CONTROL Board.	1. Check the soldering condition for IC1013, IC1019, IC1023, and IC1072 on the CONTROL Board. 2. Replace the CONTROL Board.
F91: Back Side Line RAM (on COTROL Board)error	AB xx xx xx	Back Side Line RAM's (IC1027, IC1029, IC1033, IC1035) verify error occurs on the CONTROL Board.	1. Check the soldering condition for IC1013, IC1027, IC1029, IC1033, and IC1035 on the CONTROL Board. 2. Replace the CONTROL Board.

Note:**1. Procedure for monitoring (for Front)**

- a. Turn off the scanner.
- b. Remove the Right Front Panel and Board Box Cover. (See 8.4.2.)
- c. Turn both Reference Plates (Front and Back) to the white side.
- d. Prepare to monitor a Test pin (TPFRO, TPFRE, TPFGR, TPFGE, TPFBO, or TPFBE).
→ Oscilloscope input mode: AC IN
- e. Restart the scanner while pushing “SCAN” and “OTHERS” keys.
- f. After setting input value to “14” on “CCD test (F. Lamp), execute CCD Test (F. Lamp), according to 9.6.2.2.
- g. Confirm the waveform. (See Fig 10.2-1.)

2. Procedure for monitoring (for Back)

- a. Turn off the scanner.
- b. Remove the Right Front Panel and Board Box Cover. (See 8.4.2.)
- c. Turn both Reference Plates (Front and Back) to the white side.
- d. Prepare to monitor a Test pin (TPBRO, TPBRE, TPBGR, TPBGE, TPBBO, or TPBBE).
→ Oscilloscope input mode: AC IN
- e. Restart the scanner while pushing “SCAN” and “OTHERS” keys.
- f. After setting input value to “14” on “CCD test (B. Lamp), execute CCD Test (B. Lamp), according to 9.6.2.2.
- g. Confirm the waveform. (See Fig 10.2-1.)

Fig. 10.2-1

10.3. Requirement after parts replacement

Following adjustments are required when print circuit board or part is replaced.

Replaced print circuit board or part	Required adjustment
CONTROL Board	Adjust Shading Adjust All Position & Length automatically Adjust Double Feed Detector Gain Initialize EEPROM. (See 9.6.) Set USB ID. (See 9.7.)
Flash ROM (It isn't Service parts.)	Adjust Shading
Front side optical unit or front side lamp	Adjust Shading Adjust All Position & Length automatically or the following two Adjustments should be done. (1) Adjust Front H.Position automatically (2) Adjust Front V.Position automatically *When "Adjust All Position & Length automatically" is done, Length, Back H.Position, and Back V. Position are adjusted again.
Back side optical unit or back side lamp	Adjust Shading Adjust All Position & Length automatically or 2 Adjustments should be done. (1) Adjust Back H.Position automatically (2) Adjust Back V.Position automatically *When "Adjust All Position & Length automatically" is done, Length, Front H.Position, and Front V. Position are adjusted again.
Front & Back side optical units or Front & Back side lamps	Adjust Shading Adjust All Position & Length automatically or 4 Adjustments should be done. (1) Adjust Front H.Position automatically (2) Adjust Front V.Position automatically (3) Adjust Back H.Position automatically (4) Adjust Back V.Position automatically *When "Adjust All Position & Length automatically" is done, Length is adjusted again.
SKEW [L] Board	Adjust All Position & Length automatically or 2 Adjustments should be done. (1) Adjust Front H.Position automatically (2) Adjust Back V.Position automatically
Double Feed Detector [Generate] or Double Feed Detector [Receive]	Adjust Double Feed Detector
Initialize EEPROM (It isn't Service Parts.) *1	- Adjust All Position & Length automatically - Adjust Double Feed Detector
Disassemble and assemble which influence to scanning positions. EX) Disassemble and assemble of Sub Chassis (R), (L), Main Chassis (R), (L)	Adjust All Position & Length automatically or 4 Adjustments should be done. (1) Adjust Front H.Position automatically (2) Adjust Front V.Position automatically (3) Adjust Back H.Position automatically (4) Adjust Back V.Position automatically *When "Adjust All Position & Length automatically" is done, Length is adjusted again.
Drive Roller Conveyor Roller	Adjust All Position & Length automatically or the following Adjustment should be done. (1) Adjust Length automatically

Note

*1: Only perform "Init. EEPROM" when EEPROM Error (F34) occurs.

When "Init. EEPROM" is executed, all adjustments in Service Mode 1 and Service Mode 2 need to be confirmed.

11 BLOCK DIAGRAM

11.1. Function

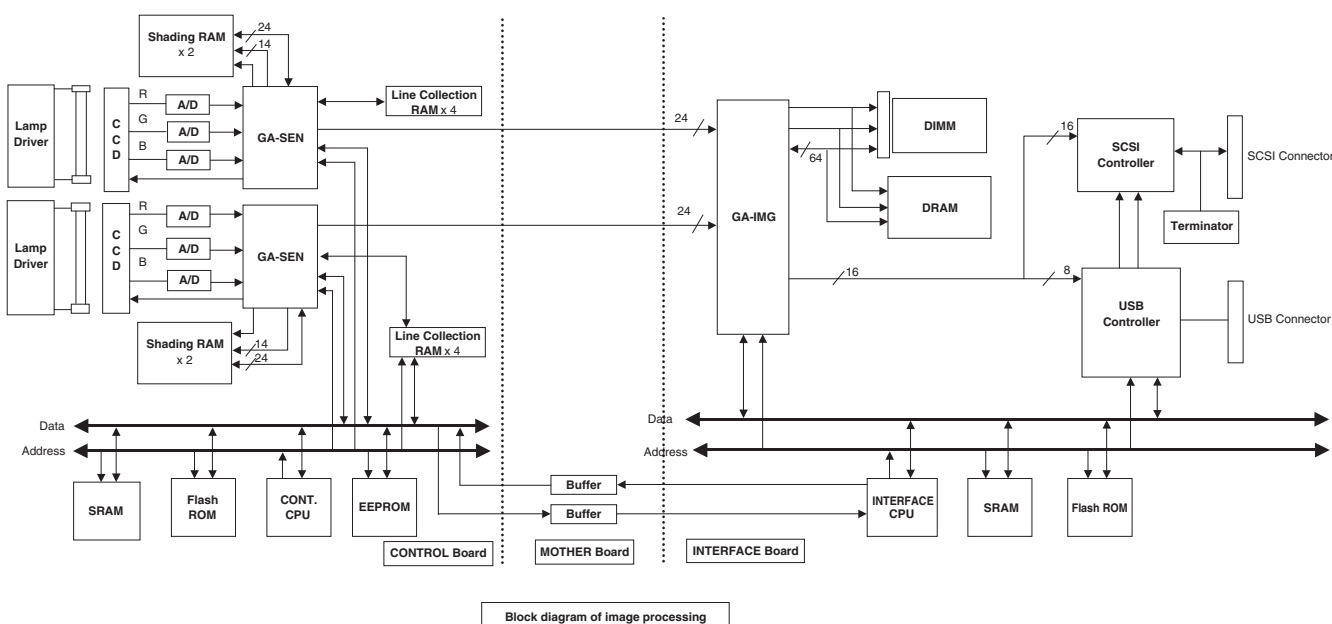


Image processing circuit

Each **CCD (CCD(F), CCD(B))** is driven by the drive pulses put out from each **GA-SEN** pulse generation circuit.

The image analog signals put out from the **CCD (F)** and the **CCD(B)** are converted by **A/D** converters (IC1003, IC1004, IC1005, IC1006, IC1009, IC1010) to digital signals for the R, G, and B components, and they are given as input to the image input processing gate arrays **GA-SEN** (IC1012, IC1013).

As the R, G, and B sensors of the CCD are arranged staggered in the subscanning direction, The **GA-SEN** performs line deviation correction after shading correction has been performed, and then the signal is put out via the **MOTHER Board** as input to the image processing gate array **GA-IMG** (IC3000) on the **INTERFACE Board**. The **Shading RAM** and the **Line Correction RAM** connected to the **GA-SEN** store these processing calculation data temporarily.

And **GA-SEN** has a built-in pulse generation circuit for chopping drive of the lamps, and the lamps are driven via Lamp Drivers (LAMP INVERTER).

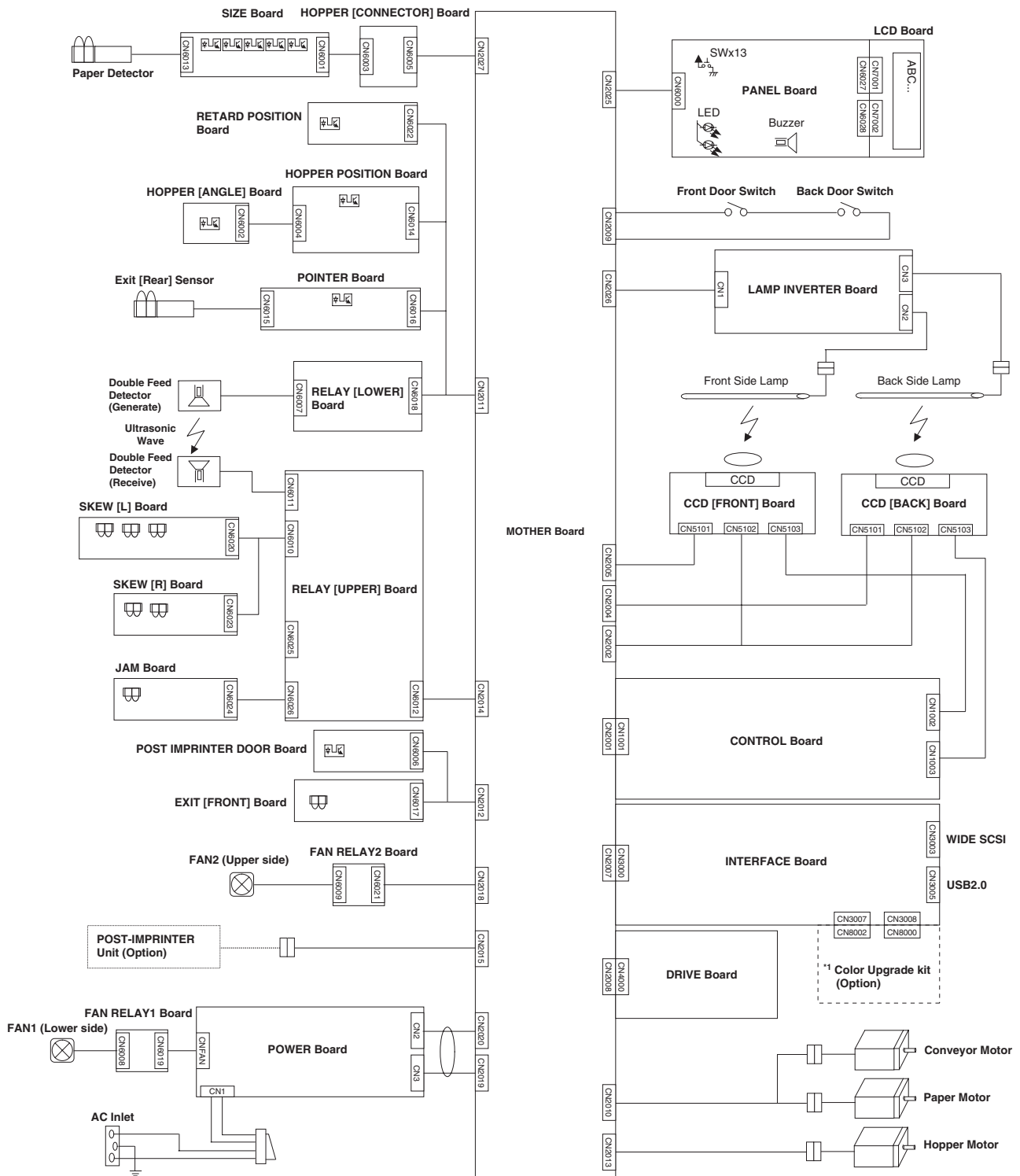
The **GA-IMG** performs MTF correction and image processing like binary-coded processing, pseudo-gradation processing (dithering, error diffusion processing), color drop-out processing, or etc. The intermediate data during processing are stored temporarily in **DRAM**.

(In case of JPEG compression for color images or gray scale images, the image data are compressed by the **GA-IMG**.)

The **GA-IMG** also controls **SCSI Controller** and **USB Controller**.

At last, all the data which have been processed by the **GA-IMG** are put out to the PC via the **SCSI controller** and **SCSI connector**, or via **USB Controller** and **USB connector**.

11.2. Boards



*1 : Only for KV-S3085 Series

11.3. Explanation of Connector

Note

Signal names which begin with asterisk (*) indicates that the corresponding signal is LOW when active.

CN2005 (MOTHER) – CN5101 (CCD [FRONT])

Pin No.		Signal Name	Description
CN2005	CN5101		
1	1	5V	+5V
2	2	GND	Ground
3	3	FP1	CCD Clock (13 MHz)
4	4	GND	Ground
5	5	FP2	CCD Clock (13 MHz)
6	6	GND	Ground
7	7	FSH	CCD Clock (13 MHz)
8	8	GND	Ground
9	9	FRST	CCD Clock (13 MHz)
10	10	GND	Ground
11	11	FCP	CCD Clock (13 MHz)
12	12	GND	Ground
13	13	CCDVER1	PCB Rev. Detect 1
14	14	CCDVER2	PCB Rev. Detect 2

CN2002 (MOTHER) – CN5102 (CCD [FRONT]) / CN5102 (CCD [BACK])

Pin No.			Signal Name	Description
CN2002	CN5102	CN5102		
1	1	–	12V	+12 V
2	2	–	GND	Ground
3	3	–	–10V	–10 V
4	4	–	GND	Ground
5	–	1	12V	+12 V
6	–	2	GND	Ground
7	–	3	–10V	–10 V
8	–	4	GND	Ground

CN2004 (MOTHER) – CN5101 (CCD [BACK])

Pin No.		Signal Name	Description
CN2004	CN5101		
1	1	5V	+5 V
2	2	GND	Ground
3	3	BP1	CCD Clock (13 MHz)
4	4	GND	Ground
5	5	BP2	CCD Clock (13 MHz)
6	6	GND	Ground
7	7	BSH	CCD Clock (13 MHz)
8	8	GND	Ground
9	9	BRST	CCD Clock (13 MHz)
10	10	GND	Ground
11	11	BCP	CCD Clock (13 MHz)
12	12	GND	Ground
13	13	CCDVER3	PCB Rev. detect 3
14	14	CCDVER4	PCB Rev. detect 4
15	–	N.C.	Non Connected

CN2001 (MOTHER) – CN1001 (CONTROL)

Pin No.		Signal Name	Description
CN2001	CN1001		
1	1	GND	Ground
2	2	GND	Ground
3	3	GND	Ground
4	4	GND	Ground
5	5	*M_HWR	CPU Write Signal
6	6	*M_CS5	Chip Select 5
7	7	*M_RD	CPU Read Signal
8	8	*M_CS6	Chip Select 6
9	9	GND	Ground
10	10	GND	Ground
11	11	GND	Ground
12	12	GND	Ground
13	13	LD [7]	Local Data Bus
14	14	LD [6]	Local Data Bus
15	15	LD [5]	Local Data Bus
16	16	LD [4]	Local Data Bus
17	17	LD [3]	Local Data Bus
18	18	LD [2]	Local Data Bus
19	19	LD [1]	Local Data Bus
20	20	LD [0]	Local Data Bus
21	21	GND	Ground
22	22	GND	Ground
23	23	*IM_REQ	Request Signal from INTERFACE to CONTROL
24	24	*IM_ACK	Acknowledge Signal from CONTROL
25	25	3.3V	+3.3 V
26	26	JS_CLK	Double – Feed Detector Clock (100 kHz)
27	27	3.3V	+3.3 V
28	28	K_MVREF	Setting Current for Paper Feed Motor
29	29	3.3V	+3.3 V
30	30	K_MCLK	Paper Feed Motor's Clock
31	31	3.3V	+3.3 V
32	32	H_MVREF	Setting Current for Conveyor Motor
33	33	GND	Ground
34	34	H_MCLK	Conveyor Motor's Clock
35	35	GND	Ground
36	36	P_MVREF	Setting Current for Hopper Motor
37	37	GND	Ground
38	38	BUZZER	Buzzer Clock
39	39	GND	Ground
40	40	5V	+5 V
41	41	SVSYNC	V sync.
42	42	5V	+5 V
43	43	*RES_DES	Not used
44	44	5V	+5 V
45	45	GND	Ground
46	46	5V	+5 V
47	47	*RES_IF	Reset Signal
48	48	*RESET5	Reset Signal
49	49	GND	Ground
50	50	GND	Ground
51	51	*DM_REQ	Not used
52	52	*DM_ACK	Not used
53	53	CPUA [15]	MAIN CPU Address
54	54	*INT_SCSI	INTERFACE Interrupt
55	55	CPUA [14]	MAIN CPU Address
56	56	*INT_MAIN	Interrupt Signal [CONTROL to INTERFACE]
57	57	CPUA [13]	MAIN CPU Address

Pin No.		Signal Name	Description
CN2001	CN1001		
58	58	3.3V	+3.3 V
59	59	CPUA [12]	MAIN CPU Address
60	60	3.3V	+3.3 V
61	61	GND	Ground
62	62	3.3V	+3.3 V
63	63	GND	Ground
64	64	3.3V	+3.3 V
65	65	GND	Ground
66	66	BDAT_CLK	Not used
67	67	GND	Ground
68	68	BDAT_EN	Back-side Data Enable
69	69	BGASD [0]	Back-side Data
70	70	BGASD [1]	Back-side Data
71	71	BGASD [2]	Back-side Data
72	72	BGASD [3]	Back-side Data
73	73	BGASD [4]	Back-side Data
74	74	BGASD [5]	Back-side Data
75	75	BGASD [6]	Back-side Data
76	76	BGASD [7]	Back-side Data
77	77	BGASD [8]	Back-side Data
78	78	BGASD [9]	Back-side Data
79	79	BGASD [10]	Back-side Data
80	80	BGASD [11]	Back-side Data
81	81	BGASD [12]	Back-side Data
82	82	BGASD [13]	Back-side Data
83	83	BGASD [14]	Back-side Data
84	84	BGASD [15]	Back-side Data
85	85	BGASD [16]	Back-side Data
86	86	BGASD [17]	Back-side Data
87	87	BGASD [18]	Back-side Data
88	88	BGASD [19]	Back-side Data
89	89	BGASD [20]	Back-side Data
90	90	BGASD [21]	Back-side Data
91	91	BGASD [22]	Back-side Data
92	92	BGASD [23]	Back-side Data
93	93	5V	+5 V
94	94	5V	+5 V
95	95	5V	+5 V
96	96	BLMPCLK	CCD Clock (13 MHz)
97	97	GND	Ground
98	98	GND	Ground
99	99	BCCDCP	CCD Clock (13 MHz)
100	100	GND	Ground
101	101	BCCDRST	CCD Clock (13 MHz)
102	102	BCCDSH	CCD Clock (13 MHz)
103	103	BCCDP2	CCD Clock (13 MHz)
104	104	BCCDP1	CCD Clock (13 MHz)
105	105	GND	Ground
106	106	GND	Ground
107	107	GND	Ground
108	108	GND	Ground
109	109	P_MCLK	Hopper Motor's Clock
110	110	SENPWDC	Sensor Power
111	111	LIMIT_L	Limit [L] Signal
112	112	LIMIT_R	Limit [R] Signal
113	113	*PREXIT	Paper Detector
114	114	PJAM	Paper Jam
115	115	PFEXIT	Exit [Front] Sensor Signal

Pin No.		Signal Name	Description
CN2001	CN1001		
116	116	PHEAD	Starting Position Sensor Signal
117	117	SKEW_L	Skew (L) Signal
118	118	SKEW_R	Skew (R) Signal
119	119	STBY	Waiting Sensor Signal
120	120	INP_RXD	Imprinter Communication Signal
121	121	*INP_CTS	Imprinter Communication Signal
122	122	INP_TXD	Imprinter Communication Signal
123	123	*INP_RTS	Imprinter Communication Signal
124	124	PINP_RXD	Imprinter Communication Signal
125	125	*PINP_CTS	Imprinter Communication Signal
126	126	PINP_TXD	Imprinter Communication Signal
127	127	GND	Ground
128	128	*PINP_RTS	Imprinter Communication Signal
129	129	GND	Ground
130	130	3.3V	+3.3 V
131	131	JSGAIN1	Double Feed Detector Gain 1
132	132	3.3V	+3.3 V
133	133	JS_OUT	Double Feed Detector Output
134	134	3.3V	+3.3 V
135	135	JSGAIN2	Double Feed Detector Gain 2
136	136	3.3V	+3.3 V
137	137	GND	Ground
138	138	GND	Ground
139	139	GND	Ground
140	140	GND	Ground
141	141	FDAT_EN	Front-side Data Enable
142	142	FDAT_CLK	Front-side Data Clock (Not used)
143	143	FGASD [0]	Front-side Data
144	144	FGASD [1]	Front-side Data
145	145	FGASD [2]	Front-side Data
146	146	FGASD [3]	Front-side Data
147	147	FGASD [4]	Front-side Data
148	148	FGASD [5]	Front-side Data
149	149	FGASD [6]	Front-side Data
150	150	FGASD [7]	Front-side Data
151	151	FGASD [8]	Front-side Data
152	152	FGASD [9]	Front-side Data
153	153	FGASD [10]	Front-side Data
154	154	FGASD [11]	Front-side Data
155	155	FGASD [12]	Front-side Data
156	156	FGASD [13]	Front-side Data
157	157	FGASD [14]	Front-side Data
158	158	FGASD [15]	Front-side Data
159	159	FGASD [16]	Front-side Data
160	160	FGASD [17]	Front-side Data
161	161	FGASD [18]	Front-side Data
162	162	FGASD [19]	Front-side Data
163	163	FGASD [20]	Front-side Data
164	164	FGASD [21]	Front-side Data
165	165	FGASD [22]	Front-side Data
166	166	FGASD [23]	Front-side Data
167	167	5V	+5 V
168	168	GND	Ground
169	169	5V	+5 V
170	170	5V	+5 V
171	171	FLMPCLK	CCD Clock (13 MHz)
172	172	FCCDCP	CCD Clock (13 MHz)
173	173	FCCDRST	CCD Clock (13 MHz)
174	174	FCCDSH	CCD Clock (13 MHz)

Pin No.		Signal Name	Description
CN2001	CN1001		
175	175	FCCDP2	CCD Clock (13 MHz)
176	176	FCCDP1	CCD Clock (13 MHz)
177	177	GND	Ground
178	178	GND	Ground
179	179	GND	Ground
180	180	GND	Ground

CN3003 (INTERFACE: SCSI)

Pin No.	Signal Name	Description
CN3003		
1	+DB [12]	Data Bus (SCSI)
2	+DB [13]	Data Bus (SCSI)
3	+DB [14]	Data Bus (SCSI)
4	+DB [15]	Data Bus (SCSI)
5	+DBP1	Data Bus (SCSI) : Parity
6	+DB [0]	Data Bus (SCSI)
7	+DB [1]	Data Bus (SCSI)
8	+DB [2]	Data Bus (SCSI)
9	+DB [3]	Data Bus (SCSI)
10	+DB [4]	Data Bus (SCSI)
11	+DB [5]	Data Bus (SCSI)
12	+DB [6]	Data Bus (SCSI)
13	+DB [7]	Data Bus (SCSI)
14	+DBP0	Data Bus (SCSI) : Parity
15	GND	Ground
16	DIFFSENS	Level Sens.
17	V_TERM	Terminator Power
18	V_TERM	Terminator Power
19	No Used	—
20	GND	Ground
21	+ATN	SCSI Control Signal
22	GND	Ground
23	+BSY	SCSI Control Signal
24	+ACK	SCSI Control Signal
25	+RST	SCSI Control Signal
26	+MSG	SCSI Control Signal
27	+SEL	SCSI Control Signal
28	+C/D	SCSI Control Signal
29	+REG	SCSI Control Signal
30	+I/O	SCSI Control Signal
31	+DB [8]	Data Bus (SCSI)
32	+DB [9]	Data Bus (SCSI)
33	+DB [10]	Data Bus (SCSI)
34	+DB [11]	Data Bus (SCSI)
35	−DB [12]	Data Bus (SCSI)
36	−DB [13]	Data Bus (SCSI)
37	−DB [14]	Data Bus (SCSI)
38	−DB [15]	Data Bus (SCSI)
39	−DBP1	DBP
40	−DB [0]	Data Bus (SCSI)
41	−DB [1]	Data Bus (SCSI)
42	−DB [2]	Data Bus (SCSI)
43	−DB [3]	Data Bus (SCSI)
44	−DB [4]	Data Bus (SCSI)
45	−DB [5]	Data Bus (SCSI)
46	−DB [6]	Data Bus (SCSI)
47	−DB [7]	Data Bus (SCSI)

Pin No.	Signal Name	Description
CN3003		
48	–DBP0	DBP
49	GND	Ground
50	GND	Ground
51	V_TERM	Terminator Power
52	V_TERM	Terminator Power
53	No used	–
54	GND	Ground
55	–ATN	SCSI Control Signal
56	GND	Ground
57	–BSY	SCSI Control Signal
58	–ACK	SCSI Control Signal
59	–RST	SCSI Control Signal
60	–MSG	SCSI Control Signal
61	–SEL	SCSI Control Signal
62	–C/D	SCSI Control Signal
63	–REQ	SCSI Control Signal
64	–I/O	SCSI Control Signal
65	–DB [8]	Data Bus (SCSI)
66	–DB [9]	Data Bus (SCSI)
67	–DB [10]	Data Bus (SCSI)
68	–DB [11]	Data Bus (SCSI)

CN3005 (INTERFACE: USB)

Pin No.	Signal Name	Description
CN3005		
1	VBUS	USB Power Bus
2	DM	-DATA
3	DP	+DATA
4	GND	Ground

CN2007 (MOTHER) – CN3000 (INTERFACE)

Pin No.		Signal Name	Description
CN2007	CN3000		
1	1	GND	Ground
2	2	GND	Ground
3	3	GND	Ground
4	4	GND	Ground
5	5	FMD [0]	Front-side Data
6	6	3.3V	3.3 V
7	7	3.3V	3.3 V
8	8	3.3V	3.3 V
9	9	FMD [1]	Front-side Data
10	10	FMD [2]	Front-side Data
11	11	FMD [3]	Front-side Data
12	12	FMD [4]	Front-side Data
13	13	FMD [5]	Front-side Data
14	14	FMD [6]	Front-side Data
15	15	FMD [7]	Front-side Data
16	16	FMD [8]	Front-side Data
17	17	FMD [9]	Front-side Data
18	18	FMD [10]	Front-side Data
19	19	FMD [11]	Front-side Data
20	20	FMD [12]	Front-side Data
21	21	FMD [13]	Front-side Data
22	22	FMD [14]	Front-side Data
23	23	FMD [15]	Front-side Data
24	24	FMD [16]	Front-side Data

Pin No.		Signal Name	Description
CN2007	CN3000		
25	25	FMD [17]	Front-side Data
26	26	FMD [18]	Front-side Data
27	27	FMD [19]	Front-side Data
28	28	FMD [20]	Front-side Data
29	29	FMD [21]	Front-side Data
30	30	FMD [22]	Front-side Data
31	31	FMD [23]	Front-side Data
32	32	FWIND	Front-side Data Enable
33	33	GND	Ground
34	34	GND	Ground
35	35	GND	Ground
36	36	GND	Ground
37	37	5V	5 V
38	38	BMD [0]	Back-side Data
39	39	BMD [1]	Back-side Data
40	40	BMD [2]	Back-side Data
41	41	BMD [3]	Back-side Data
42	42	BMD [4]	Back-side Data
43	43	BMD [5]	Back-side Data
44	44	BMD [6]	Back-side Data
45	45	BMD [7]	Back-side Data
46	46	BMD [8]	Back-side Data
47	47	BMD [9]	Back-side Data
48	48	BMD [10]	Back-side Data
49	49	BMD [11]	Back-side Data
50	50	BMD [12]	Back-side Data
51	51	BMD [13]	Back-side Data
52	52	BMD [14]	Back-side Data
53	53	BMD [15]	Back-side Data
54	54	BMD [16]	Back-side Data
55	55	BMD [17]	Back-side Data
56	56	BMD [18]	Back-side Data
57	57	BMD [19]	Back-side Data
58	58	BMD [20]	Back-side Data
59	59	BMD [21]	Back-side Data
60	60	BMD [22]	Back-side Data
61	61	BMD [23]	Back-side Data
62	62	BWIND	Back-side Data Enable
63	63	5V	5 V
64	64	GND	Ground
65	65	5V	5 V
66	66	GND	Ground
67	67	5V	5 V
68	68	VWIND	V Sync.
69	69	GND	Ground
70	70	GND	Ground
71	71	GND	Ground
72	72	GND	Ground
73	73	3.3V	3.3 V
74	74	3.3V	3.3 V
75	75	3.3V	3.3 V
76	76	3.3V	3.3 V
77	77	MCDT [0]	Data (CONTROL to INTERFACE)
78	78	MCDT [1]	Data (CONTROL to INTERFACE)
79	79	MCDT [2]	Data (CONTROL to INTERFACE)
80	80	MCDT [3]	Data (CONTROL to INTERFACE)
81	81	MCDT [4]	Data (CONTROL to INTERFACE)
82	82	MCDT [5]	Data (CONTROL to INTERFACE)
83	83	MCDT [6]	Data (CONTROL to INTERFACE)

Pin No.		Signal Name	Description
CN2007	CN3000		
84	84	MCDT [7]	Data (CONTROL to INTERFACE)
85	85	GND	Ground
86	86	GND	Ground
87	87	GND	Ground
88	88	GND	Ground
89	89	MSD [0]	Data (INTERFACE to CONTROL)
90	90	MSD [1]	Data (INTERFACE to CONTROL)
91	91	MSD [2]	Data (INTERFACE to CONTROL)
92	92	MSD [3]	Data (INTERFACE to CONTROL)
93	93	MSD [4]	Data (INTERFACE to CONTROL)
94	94	MSD [5]	Data (INTERFACE to CONTROL)
95	95	MSD [6]	Data (INTERFACE to CONTROL)
96	96	MSD [7]	Data (INTERFACE to CONTROL)
97	97	GND	Ground
98	98	GND	Ground
99	99	GND	Ground
100	100	GND	Ground
101	101	*MSEND	Communication Signal (for CONTROL and INTERFACE)
102	102	*WTDLD	Communication Signal (for CONTROL and INTERFACE)
103	103	*MACK	Communication Signal (for CONTROL and INTERFACE)
104	104	GND	Ground
105	105	*IFACK	Communication Signal (for CONTROL and INTERFACE)
106	106	GND	Ground
107	107	*IFSEND	Communication Signal (for CONTROL and INTERFACE)
108	108	*RSTCPU	INTERFACE CPU Reset
109	109	TERMP	Terminator Enable
110	110	*IRQSC	INTERFACE to CONTROL Interrupt
111	111	3.3V	3.3 V
112	112	*SCANEN	I/F Buffer Ready
113	113	3.3V	3.3 V
114	114	*IRQMCP	Interrupt Signal (CONTROL to INTERFACE)
115	115	3.3V	3.3 V
116	116	*RESET	System Reset
117	117	GND	Ground
118	118	GND	Ground
119	119	GND	Ground
120	120	GND	Ground

CN3007 (INTERFACE) – CN8002 (Color Upgrade kit: Option) : Only for KV-S3085 Series

Pin No.		Signal Name	Description
CN3007	CN8002		
1	1	+5 V	5 V
2	2	+5 V	5 V
3	3	+3V	3.3V
4	4	+3V	3.3V
5	5	CPUA [17]	CPU Address
6	6	CPUA [16]	CPU Address
7	7	CPUA [15]	CPU Address
8	8	CPUA [14]	CPU Address
9	9	CPUA [13]	CPU Address
10	10	CPUA [12]	CPU Address
11	11	CPUA [11]	CPU Address
12	12	CPUA [10]	CPU Address
13	13	CPUA [9]	CPU Address
14	14	CPUA [8]	CPU Address
15	15	CPUA [7]	CPU Address
16	16	CPUA [6]	CPU Address
17	17	CPUA [5]	CPU Address

Pin No.		Signal Name	Description
CN3007	CN8002		
18	18	CPUA [4]	CPU Address
19	19	CPUA [3]	CPU Address
20	20	CPUA [2]	CPU Address
21	21	CPUA [1]	CPU Address
22	22	CPUA [0]	CPU Address
23	23	GND	Ground
24	24	CPURD	CPU Read Signal
25	25	CPUD [8]	CPU Data Bus
26	26	CPUD [9]	CPU Data Bus
27	27	CPUD [10]	CPU Data Bus
28	28	CPUD [11]	CPU Data Bus
29	29	CPUD [12]	CPU Data Bus
30	30	CPUD [13]	CPU Data Bus
31	31	CPUD [14]	CPU Data Bus
32	32	CPUD [15]	CPU Data Bus
33	33	GND	Ground
34	34	GND	Ground

CN3008 (INTERFACE) – CN8000 (Color Upgrade kit: Option) : Only for KV-S3085 Series

Pin No.		Signal Name	Description
CN3008	CN8000		
1	1	MD0	CPU Mode select
2	2	MD1	CPU Mode select
3	3	CS0	CPU Chip Select
4	4	CSROM	ROM Select
5	5	CS2	CPU Chip Select
6	6	CSROM	ROM Select

CN2008 (MOTHER) – CN4000 (DRIVE)

Pin No.		Signal Name	Description
CN2008	CN4000		
1	1	24VSW	24V Door Switch
2	2	24VSW	24V Door Switch
3	3	24VSW	24V Door Switch
4	4	24VSW	24V Door Switch
5	5	24VSW	24V Door Switch
6	6	24VSW	24V Door Switch
7	7	SCAD24	Front Door and Back Door Switch
8	8	DOOR24	Lamp Door Switch
9	9	24V	24 V (for imprinter's printing)
10	10	24V	24 V (for imprinter's printing)
11	11	GND2	Ground
12	12	GND2	Ground
13	13	*HA	Conveyor Motor Phase Signal
14	14	*HA	Conveyor Motor Phase Signal
15	15	*HA	Conveyor Motor Phase Signal
16	16	GND2	Ground
17	17	HCOMA	Conveyor Motor Phase Signal
18	18	HCOMA	Conveyor Motor Phase Signal
19	19	HCOMA	Conveyor Motor Phase Signal
20	20	GND2	Ground
21	21	HA	Conveyor Motor Phase Signal
22	22	HA	Conveyor Motor Phase Signal
23	23	HA	Conveyor Motor Phase Signal
24	24	GND2	Ground
25	25	*HB	Conveyor Motor Phase Signal
26	26	*HB	Conveyor Motor Phase Signal
27	27	*HB	Conveyor Motor Phase Signal

Pin No.		Signal Name	Description
CN2008	CN4000		
28	28	GND2	Ground
29	29	HCOMB	Conveyor Motor Phase Signal
30	30	HCOMB	Conveyor Motor Phase Signal
31	31	HCOMB	Conveyor Motor Phase Signal
32	32	GND2	Ground
33	33	HB	Conveyor Motor Phase Signal
34	34	HB	Conveyor Motor Phase Signal
35	35	HB	Conveyor Motor Phase Signal
36	36	GND2	Ground
37	37	GND2	Ground
38	38	GND2	Ground
39	39	GND2	Ground
40	40	GND2	Ground
41	41	*KA	Paper Feed Motor Phase Signal
42	42	*KA	Paper Feed Motor Phase Signal
43	43	*KA	Paper Feed Motor Phase Signal
44	44	GND2	Ground
45	45	KCOMA	Paper Feed Motor Phase Signal
46	46	KCOMA	Paper Feed Motor Phase Signal
47	47	KCOMA	Paper Feed Motor Phase Signal
48	48	GND2	Ground
49	49	KA	Paper Feed Motor Phase Signal
50	50	KA	Paper Feed Motor Phase Signal
51	51	KA	Paper Feed Motor Phase Signal
52	52	GND2	Ground
53	53	*KB	Paper Feed Motor Phase Signal
54	54	*KB	Paper Feed Motor Phase Signal
55	55	*KB	Paper Feed Motor Phase Signal
56	56	GND2	Ground
57	57	KCOMB	Paper Feed Motor Phase Signal
58	58	KCOMB	Paper Feed Motor Phase Signal
59	59	KCOMB	Paper Feed Motor Phase Signal
60	60	GND2	Ground
61	61	KB	Paper Feed Motor Phase Signal
62	62	KB	Paper Feed Motor Phase Signal
63	63	KB	Paper Feed Motor Phase Signal
64	64	GND2	Ground
65	65	GND2	Ground
66	66	GND2	Ground
67	67	GND2	Ground
68	68	GND2	Ground
69	69	*PA	Hopper Motor Phase Signal
70	70	GND2	Ground
71	71	*PA	Hopper Motor Phase Signal
72	72	GND2	Ground
73	73	PCOMA	Hopper Motor Phase Signal
74	74	GND2	Ground
75	75	PCOMA	Hopper Motor Phase Signal
76	76	GND2	Ground
77	77	PA	Hopper Motor Phase Signal
78	78	GND	Ground
79	79	PA	Hopper Motor Phase Signal
80	80	GND	Ground
81	81	*PB	Hopper Motor Phase Signal
82	82	GND	Ground
83	83	*PB	Hopper Motor Phase Signal
84	84	GND	Ground
85	85	PCOMB	Hopper Motor Phase Signal
86	86	GND	Ground

Pin No.		Signal Name	Description
CN2008	CN4000		
87	87	PCOMB	Hopper Motor Phase Signal
88	88	GND	Ground
89	89	PB	Hopper Motor Phase Signal
90	90	GND	Ground
91	91	PB	Hopper Motor Phase Signal
92	92	GND	Ground
93	93	GND	Ground
94	94	INP_SW	Imprinter Power Control
95	95	P_MCLK	Hopper Motor Clock (Approx. 1 kHz)
96	96	5V	5 V
97	97	5V	5 V
98	98	5V	5 V
99	99	SCADOOR	Lamp Door Detect
100	100	5VPT	Logic IC Power for imprinter
101	101	DOOR1	24V Detect
102	102	DOOR2	Front, Back Door Detect
103	103	H_MVRE	Current Setting for Conveyor Motor
104	104	*RESETP	Reset
105	105	H_MCLK	Conveyor Motor Clock (Approx. 1 kHz)
106	106	DECM1	MAIN CPU Control
107	107	K_MVRE	Current Setting for Paper Feed Motor
108	108	DRV_VER2	PCB Rev. Detect
109	109	K_MCLK	Paper Feed Motor Clock (Approx. 1 kHz)
110	110	DECM2	MAIN CPU Control
111	111	P_MVRE	Current Setting for Hopper Motor
112	112	DRV_VER1	PCB Rev. Detect
113	113	LD [7]	Local Data Bus (MAIN CPU)
114	114	LD [6]	Local Data Bus (MAIN CPU)
115	115	LD [5]	Local Data Bus (MAIN CPU)
116	116	LD [4]	Local Data Bus (MAIN CPU)
117	117	LD [3]	Local Data Bus (MAIN CPU)
118	118	LD [2]	Local Data Bus (MAIN CPU)
119	119	LD [1]	Local Data Bus (MAIN CPU)
120	120	LD [0]	Local Data Bus (MAIN CPU)

CN2018 (MOTHER) – CN6021 (FAN RELAY 2)

Pin No.		Signal Name	Description
CN2018	CN6021		
1	1	V+	24 V
2	2	GND	Ground
3	3	FANLK	Fan Motor Lock Detect

FAN RELAY 2 (CN6009) – Fan 2

Pin No.		Signal Name	Description
CN6009	Fan 2		
1	1	24V	24 V
2	2	GND	Ground
3	3	SIG	Fan

CN1002 (CONTROL) – CN5103 (CCD [FRONT])

Pin No.		Signal Name	Description
CN1002	CN5103		
1	1	FR_EVEN	Pixel Signal
2	2	GND	Ground
3	3	FR_ODD	Pixel Signal
4	4	GND	Ground
5	5	FG_EVEN	Pixel Signal
6	6	GND	Ground
7	7	FG_ODD	Pixel Signal
8	8	GND	Ground
9	9	FB_EVEN	Pixel Signal
10	10	GND	Ground
11	11	FB_ODD	Pixel Signal
12	12	GND	Ground

CN1003 (CONTROL) – CN5103 (CCD [BACK])

Pin No.		Signal Name	Description
CN1003	CN5103		
1	1	BR_EVEN	Pixel Signal
2	2	GND	Ground
3	3	BR_ODD	Pixel Signal
4	4	GND	Ground
5	5	BG_EVEN	Pixel Signal
6	6	GND	Ground
7	7	BG_ODD	Pixel Signal
8	8	GND	Ground
9	9	BB_EVEN	Pixel Signal
10	10	GND	Ground
11	11	BB_ODD	Pixel Signal
12	12	GND	Ground
13	–	N.C.	Non Connected

CN2026 (MOTHER) – CN1 (LAMP INVERTER)

Pin No.		Signal Name	Description
CN2026	CN1		
1	1	24VSW	24 V (Door Switch ON)
2	2	GND2	Ground
3	3	B LAMP ON	Back-side Lamp ON
4	4	B LAMP CLK	Back-side Lamp Clock (70 kHz)
5	5	GND	Ground
6	6	24VSW	24 V (Door switch ON)
7	7	GND2	Ground
8	8	F LAMP ON	Front-side Lamp ON
9	9	F LAMP CLK	Front-side Lamp Clock (70 kHz)
10	10	GND	Ground

CN2009 (MOTHER) – Front Door Switch, Back Door Switch, Lamp Door Switch (Not used)

Pin No.				Signal Name	Description
CN2009	Front Door Switch	Back Door Switch	Lamp Door (Not used)		
1	2	–	–	24V	24 V
2	3	–	–	24V DOOR1	Front, Back Door
3	–	2	–	24V DOOR1	Front, Back Door
4	–	3	–	24V DOOR2	Not used
5	–	–	2	24V DOOR2	Not used
6	–	–	3	24VSW	24 V (Door Switch ON)

CN2010 (MOTHER) – Conveyor Motor / Paper Feed Motor

Pin No.			Signal Name	Description
CN2010	Conveyor Motor	Paper Feed Motor		
1	1	–	*HA	Conveyor Motor Phase Signal
2	2	–	HCOMA	Conveyor Motor Phase Signal
3	3	–	HA	Conveyor Motor Phase Signal
4	4	–	*HB	Conveyor Motor Phase Signal
5	5	–	HCOMB	Conveyor Motor Phase Signal
6	6	–	HB	Conveyor Motor Phase Signal
7	–	1	*KA	Paper Feed Motor Phase Signal
8	–	2	KCOMA	Paper Feed Motor Phase Signal
9	–	3	KA	Paper Feed Motor Phase Signal
10	–	4	*KB	Paper Feed Motor Phase Signal
11	–	5	KCOMB	Paper Feed Motor Phase Signal
12	–	6	KB	Paper Feed Motor Phase Signal

Hopper Motor – CN2013 (MOTHER)

Pin No.		Signal Name	Description
Hopper Motor	CN2013		
1	1	*PA	Hopper Motor Phase Signal
2	–	N.C.	Non connected
3	2	PCOMA	Hopper Motor Phase Signal
4	3	PA	Hopper Motor Phase Signal
5	4	*PB	Hopper Motor Phase Signal
6	5	PCOMB	Hopper Motor Phase Signal
7	6	PB	Hopper Motor Phase Signal
8	–	N.C.	Non connected

CN2027 (MOTHER) – CN6005 (HOPPER [CONNECTOR])

Pin No.		Signal Name	Description
CN2027	CN6005		
1	1	5VSLP	5 V (Stand-by)
2	2	PSIZE1	Paper Size A3
3	3	PSIZE2	Paper Size B4
4	4	PSIZE3	Paper Size A4
5	5	PSIZE4	Paper Size B5
6	6	PSIZE5	Paper Size A6
7	7	*PEXIST	Paper Detector
8	8	GND	Ground
9	9	GND	Ground

CN2011 (MOTHER) – CN6014(HOPPER [POSITION]) / CN6016 (POINTER) / CN6018 (RELAY [LOWER]) / CN6022 (RETARD [POSITION])

Pin No.					Signal Name	Description
CN2011	CN6014	CN6016	CN6018	CN6022		
1	1	–	–	–	5VSLP	5 V (Stand-by)
2	2	–	–	–	HOPPER1	Hopper (Lower)
3	3	–	–	–	HOPPER2	Hopper (Center)
4	4	–	–	–	HOPPER3	Hopper (Upper)
5	5	–	–	–	GND	Ground
6	–	–	–	1	5VSLP	5 V (Stand-by)
7	–	1	–	–	5VSLP	5 V (Stand-by)
8	–	2	–	–	*PREXIT	Exit (Rear)
9	–	3	–	–	POINTER	Pointer Detector
10	–	4	–	–	GND	Ground
11	–	–	1	–	24V	24 V
12	–	–	2	–	GND	Ground
13	–	–	3	–	5VSEN	Sensor Power
14	–	–	4	–	GND	Ground
15	–	–	5	–	JS_CLK	Double Feed Detector Clock (100 kHz)
16	–	–	6	–	JSGAINT	Double Feed Detector Output
17	–	–	–	2	RETARD	Retard Roller Release
18	–	–	–	3	GND	Ground

CN2012 (MOTHER) – CN6006 (POST IMPRINTER DOOR) / CN6017 (EXIT [FRONT])

Pin No.			Signal Name	Description
CN2012	CN6006	CN6017		
1	1	–	5VSLP	+5 V (Stand-by)
2	2	–	INPDOOR	Post Imprinter Door
3	3	–	GND	Ground
4	–	–	N.C.	Non Connected
5	–	1	5VSEN	5 V Sensor Power
6	–	2	PFEXIT	Exit [Front]
7	–	3	GND	Ground

CN6003 (HOPPER [CONNECTOR]) – CN6001(SIZE)

Pin No.		Signal Name	Description
CN6003	CN6001		
1	10	5VSLP	5 V (Stand-by)
2	9	5VSLP	5 V (Stand-by)
3	8	PSIZE1	Paper Size A3
4	7	PSIZE2	Paper Size B4
5	6	PSIZE3	Paper Size A4
6	5	PSIZE4	Paper Size B5
7	4	PSIZE5	Paper Size A6
8	3	*PEXIST	Detect Paper
9	2	GND	Ground
10	1	GND	Ground

CN6013 (SIZE) – Paper Sensor

Pin No.		Signal Name	Description
CN6013	Paper Sensor		
1	1	5VSLP	5 V (Stand-by)
2	2	*PEXIST	Exit (Front)
3	3	GND	Ground
4	–	F.G	Frame Ground

CN6004 (HOPPER [POSITION]) – CN6002 (HOPPER [ANGLE])

Pin No.		Signal Name	Description
CN6004	CN6002		
1	4	5VSLP	5 V (Stand-by)
2	3	HOPPER3	Hopper (Upper)
3	2	GND	Ground
4	1	GND	Ground

CN6015 (POINTER) – Exit [Rear] Sensor

Pin No.		Signal Name	Description
CN6015	Exit [Rear] Sensor		
1	1	5VSLP	5 V (Stand-by)
2	2	*PREXIT	Exit (Rear)
3	3	GND	Ground

Double Feed Detector (Generate) – CN6007 (RELAY [LOWER])

Pin No.		Signal Name	Description
Double Feed Detector (Generate)	CN6007		
1	1	USOUND_S1	Double Feed Detector Output (+)
2	2	N.C.	Non Connected
3	3	USOUND_S2	Double Feed Detector Output (-)
4	4	F.G	Frame Ground

CN2025 (MOTHER) – CN6000 (PANEL)

Pin No.		Signal Name	Description
CN2025	CN6000		
1	1	GND	Ground
2	2	ENB_BZ	Buzzer Enable
3	3	GND	Ground
4	4	BUZZER	Buzzer Clock (2 kHz)
5	5	GND	Ground
6	6	GND	Ground
7	7	GND	Ground
8	8	*DECKY2	MAIN CPU Control signal
9	9	*LED_GRN	LED Green Enable
10	10	*DECKY1	MAIN CPU Control Signal
11	11	*LED_RED	LED Red Enable
12	12	LCD_RW	LCD Control Signal
13	13	5V	5 V
14	14	LCD_RS	LCD Control Signal
15	15	5VSLP	5 V (Stand-by)
16	16	LCD_E	LCD Control Signal
17	17	LD [7]	Local Data Bus (MAIN CPU)
18	18	LD [0]	Local Data Bus (MAIN CPU)
19	19	LD [6]	Local Data Bus (MAIN CPU)
20	20	LD [1]	Local Data Bus (MAIN CPU)
21	21	LD [5]	Local Data Bus (MAIN CPU)
22	22	LD [2]	Local Data Bus (MAIN CPU)
23	23	LD [4]	Local Data Bus (MAIN CPU)
24	24	LD [3]	Local Data Bus (MAIN CPU)

CN6027 (PANEL) – CN7001(LCD)

Pin No.		Signal Name	Description
CN6027	CN7001		
1	1	RS0	LCD Control Signal
2	2	GND	Ground
3	3	RW	LCD Control Signal
4	4	GND	Ground
5	5	E	LCD Control Signal
6	6	GND	Ground
7	7	DB0	LCD Data Bus
8	8	GND	Ground
9	9	N.C.	Non Connected
10	10	N.C.	Non Connected
11	11	DB1	LCD Data Bus
12	12	DB2	LCD Data Bus
13	13	DB3	LCD Data Bus
14	14	GND	Ground

CN6028 (PANEL) – CN7002 (LCD)

Pin No.		Signal Name	Description
CN6028	CN7002		
1	1	GND	Ground
2	2	GND	Ground
3	3	GND	Ground
4	4	VO	LCD Contrast
5	5	GND	Ground
6	6	VOUT	+5 V
7	7	VDD	+5 V
8	8	DB7	LCD Data Bus
9	9	GND	Ground
10	10	DB6	LCD Data Bus
11	11	GND	Ground
12	12	DB5	LCD Data Bus
13	13	GND	Ground
14	14	DB4	LCD Data Bus

CN2015 (MOTHER) – Post Imprinter Unit (Option)

Pin No.		Signal Name	Description
CN2015	Post Imprinter Unit		
1	1	PCBNUM	PCB Rev. Detect
2	8	*INP_RTSP	Imprinter Communication Signal
3	3	INP_RXDP	Imprinter Communication Signal
4	4	*INP_CTSP	Imprinter Communication Signal
5	5	INP_TXDP	Imprinter Communication Signal
6	6	NUMRES	Imprinter Reset
7	7	NUMBER	Imprinter Control Signal
8	12	5VPT	5 V (Logic Power for Imprinter)
9	9	GND	Ground
10	10	GND	Ground
11	11	24VPT	24 V
12	—	3.3VPT	3.3 V
13	—	GND	Ground
14	—	GND	Ground
—	2	N.C.	Non Connected

CN2014 (MOTHER) – CN6012 (RELAY [UPPER])

Pin No.		Signal Name	Description
CN2014	CN6012		
1	–	PREPCBNUM	PCB Rev. Detect
2	–	PINT_RTSC	Imprinter Communication Signal
3	–	PINTRXDP	Imprinter Communication Signal
4	–	PINT_CTSP	Imprinter Communication Signal
5	–	PINT_TXDP	Imprinter Communication Signal
6	–	PRENUMRES	Imprinter Reset
7	–	PRENUMBER	Imprinter Control Signal
8	–	5VPT	5 V (Logic Power for Imprinter)
9	–	GND	Ground
10	–	GND	Ground
11	–	24VPT	24 V (for Imprinter's printing)
12	–	3.3VPT	3.3 V (for imprinter's Logic)
13	–	GND	Ground
14	–	*PINP_ENC	Non Connected
15	1	12V	12 V
16	2	GND	Ground
17	3	*PINPDOOR	Non Connected
18	4	PJAM	Paper Jam
19	5	STBY	Waiting Sensor Signal
20	6	LIMIT_R	Limit (R) Signal
21	7	SKEW_R	Skew (R) Signal
22	8	PHEAD	Starting Position Sensor Signal
23	9	SKEW_L	Skew (L) Signal
24	10	LIMIT_L	Limit (L) Signal
25	11	5VSEN	5 V (Sensor Power)
26	12	5VSEN	5 V (Sensor Power)
27	13	5VSLP	5 V (Stand-by)
28	14	5VSEN	5 V (Sensor Power)
29	15	GND	Ground
30	16	JS_OUT	Double Feed Detector Clock (100 kHz)
31	17	JSGAINR	Double Feed Detector Output
32	18	GND	Ground
33	19	–10V	–10 V
34	20	GND	Ground

CN6010 (RELAY [UPPER]) – CN6023 (SKEW [R]) / CN6020 (SKEW [L])

Pin No.			Signal Name	Description
CN6010	CN6023	CN6020		
1	1	–	LIMIT_R	Limit (R) Signal
2	2	–	SKEW_R	Skew (R) Signal
3	3	–	5VSEN	5 V (Sensor Power)
4	4	–	5VSEN	5 V (Sensor Power)
5	5	–	GND	Ground
6	6	–	GND	Ground
7	–	1	STBY	Waiting Sensor Signal
8	–	2	PHEAD	Starting Position Sensor Signal
9	–	3	SKEW_L	Skew (L) Signal
10	–	4	LIMIT_L	Limit (L) Signal
11	–	5	5VSEN	5 V (Sensor Power)
12	–	6	5VSEN	5 V (Sensor Power)
13	–	7	GND	Ground
14	–	8	GND	Ground

CN6024 (JAM) – CN6026 (RELAY [UPPER])

Pin No.		Signal Name	Description
CN6024	CN6026		
1	1	5VSEN	5 V (Sensor Power)
2	2	PJAM	Paper Jam
3	3	GND	Ground

Double Feed Detector (Receive) – CN6011 (RELAY [UPPER])

Pin No.		Signal Name	Description
Double Feed Detector (Receive)	CN6011		
1	1	USOUND_R1	Double Feed Detector Input (+)
2	2	USOUND_R2	Double Feed Detector Input (–)
3	3	F.G.	Frame Ground

CN6019 (FAN RELAY 1) – POWER Board

Pin No.		Signal Name	Description
CN6019	POWER Board		
1	1	24V	24 V
2	2	GND	Ground
3	3	SIG	Fan Motor Lock Detect

CN6008 (FAN RELAY 1) – Fan 1

Pin No.		Signal Name	Description
CN6008	Fan 1		
1	1	24V	24 V
2	2	GND	Ground
3	3	SIG	Fan Motor Lock Detect

CN2019, CN2020 (MOTHER) – POWER Board

Pin No.		Signal Name	Description
CN2019	CN2020		
1	–	-12V	-12 V
2	–	14V	14 V
3	–	24V	24 V
4	–	24V	24 V
5	–	GND	Ground
6	–	GND	Ground
7	–	GND	Ground
8	–	GND	Ground
–	1	STAND BY	Stand-by signal
–	2	5V	5 V
–	3	5V	5 V
–	4	GND	Ground
–	5	GND	Ground
–	6	GND	Ground
–	7	3.3V	3.3 V

12 SCHEMATIC DIAGRAM

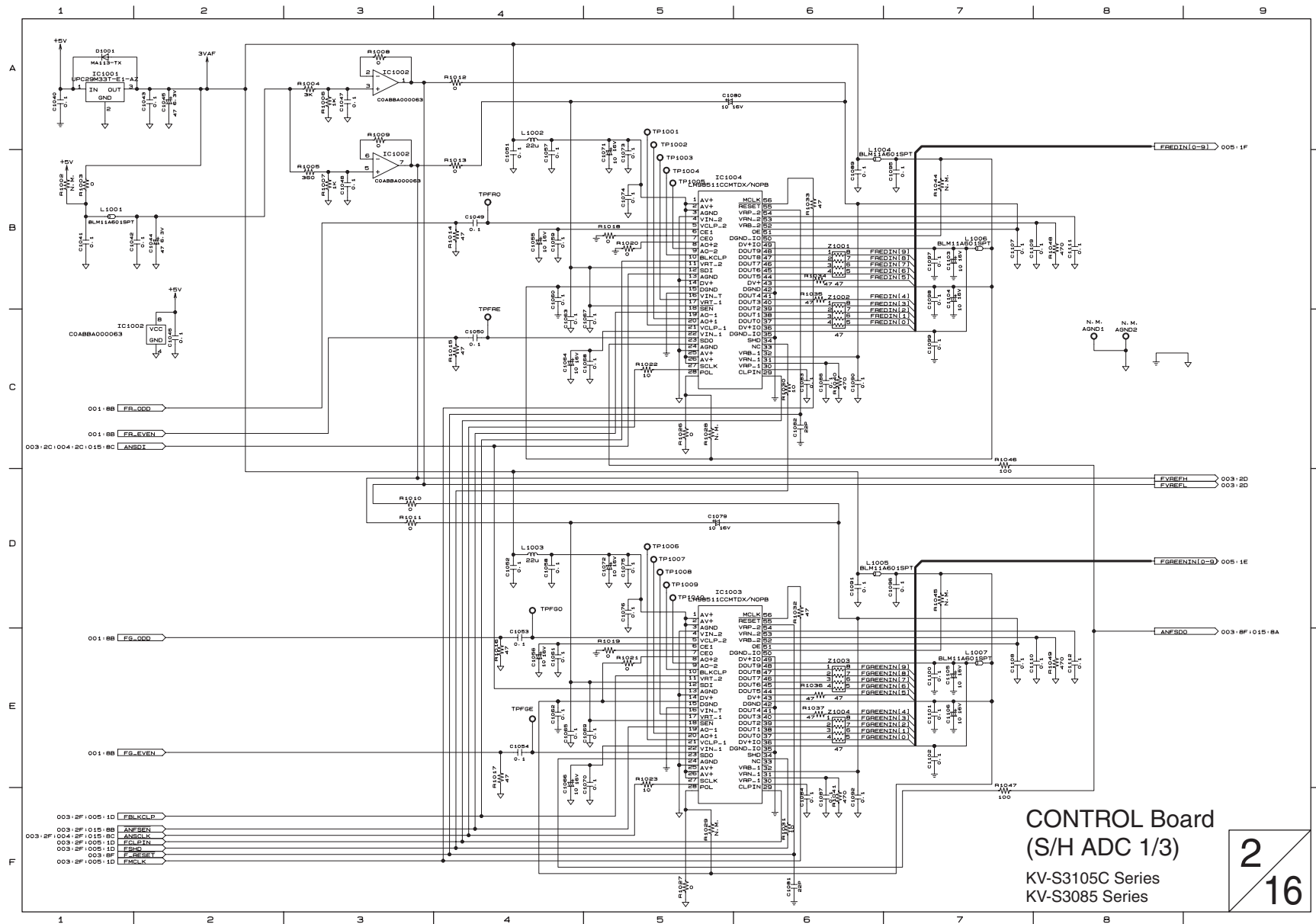
IMPORTANT SAFETY NOTICE

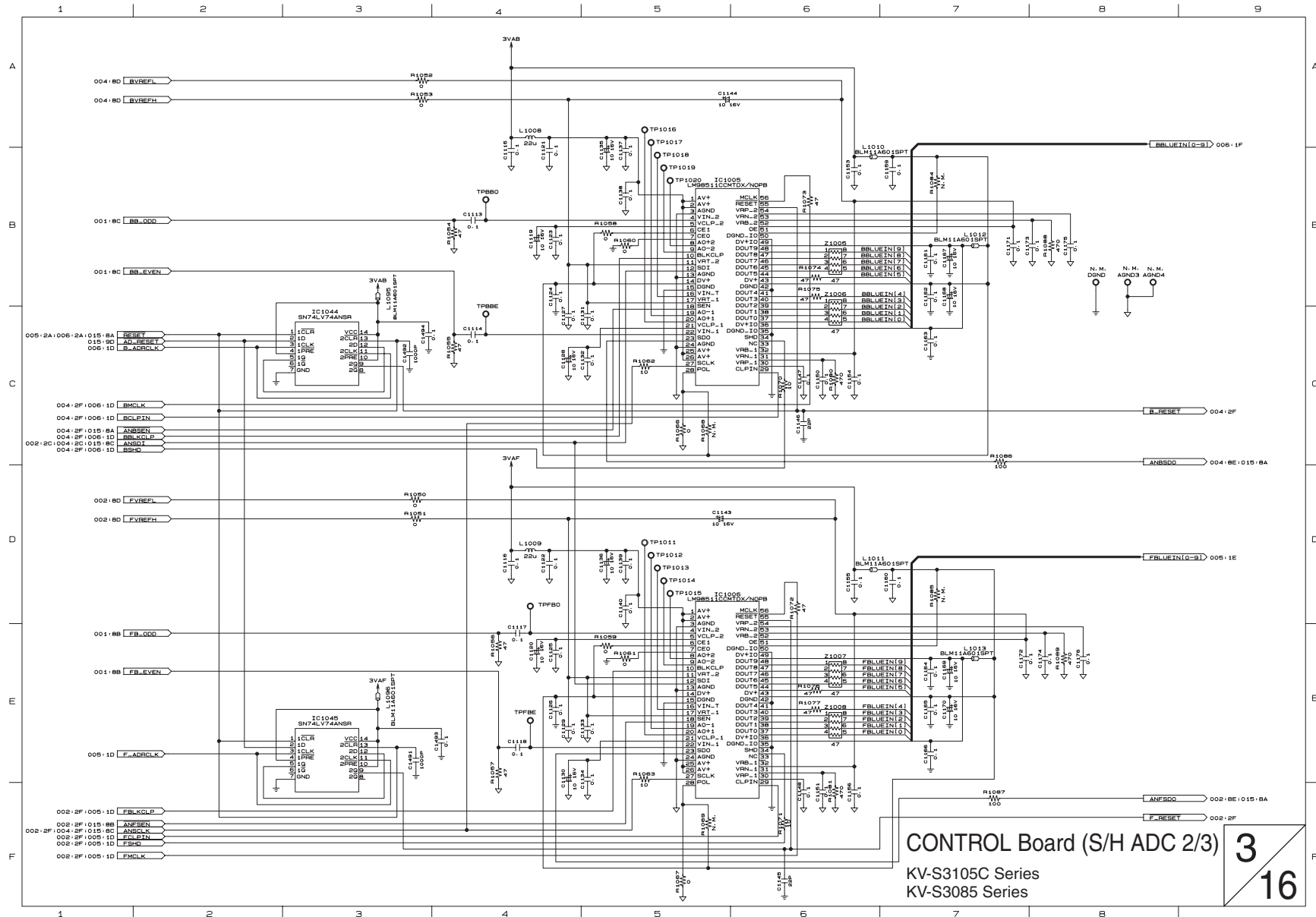
Components identified by  mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

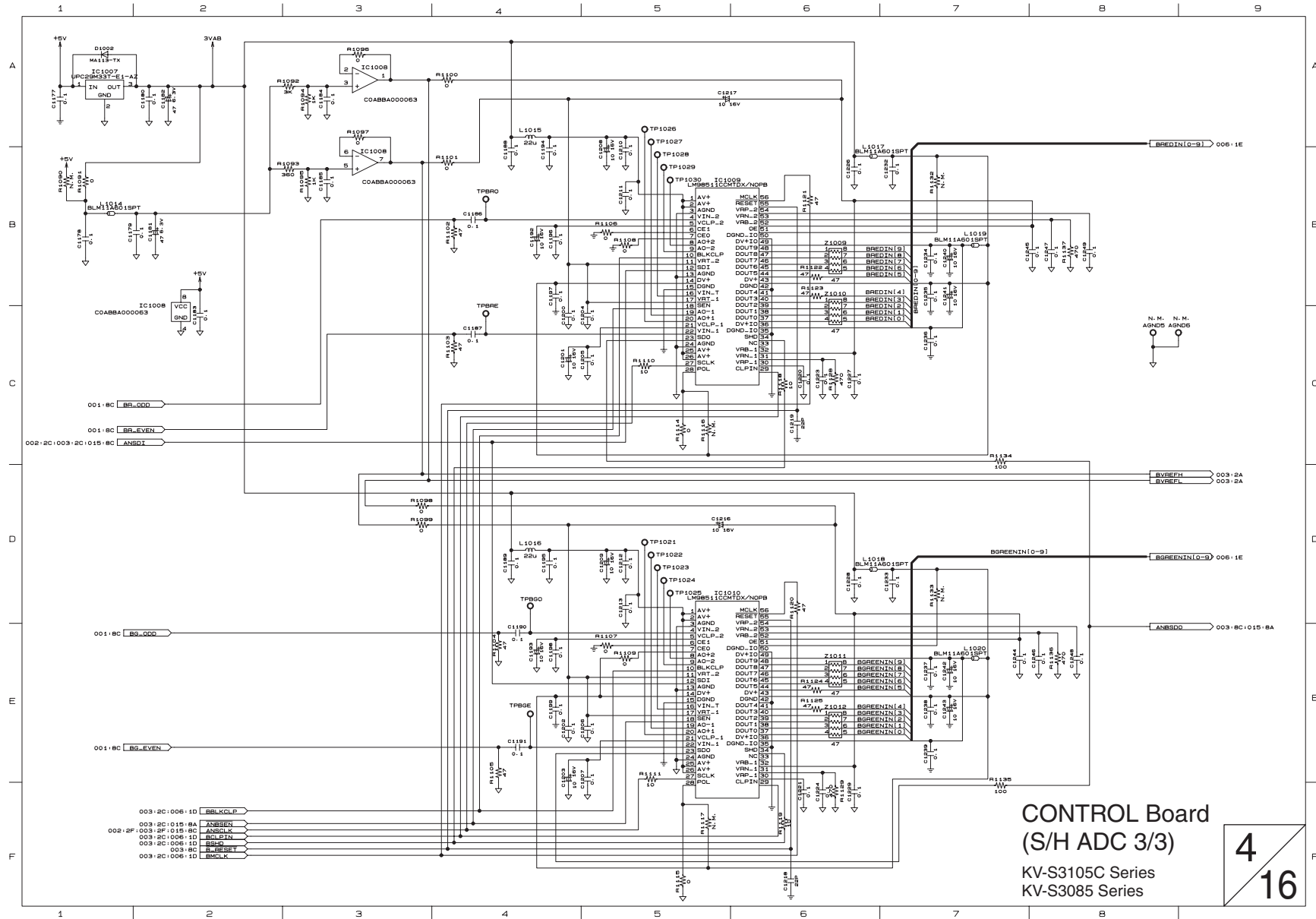
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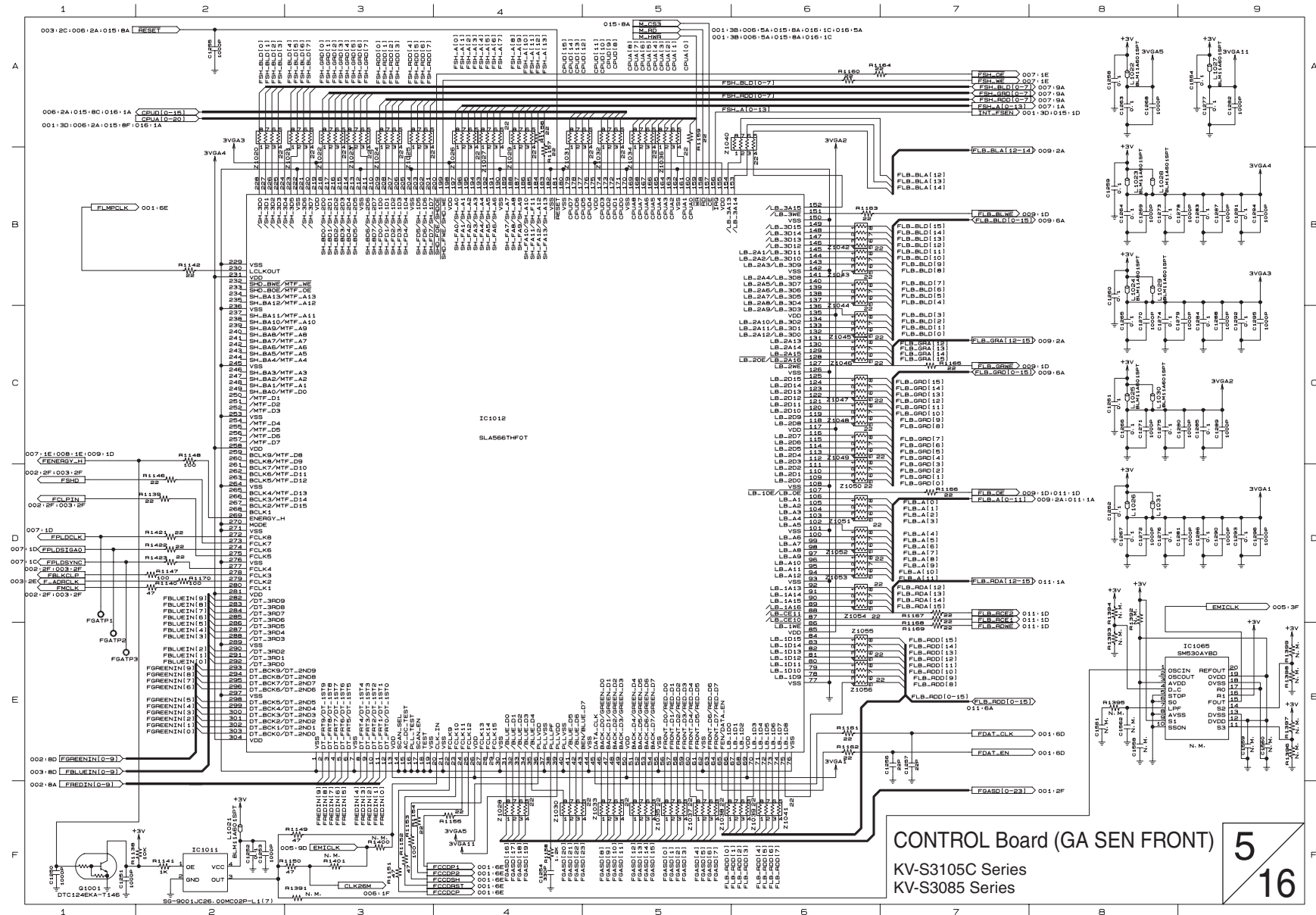
- 12.1 CONTROL Board
- 12.2 INTERFACE Board
- 12.3 MOTHER Board
- 12.4 DRIVE Board
- 12.5 LCD Board
- 12.6 PANEL and SENSOR Boards

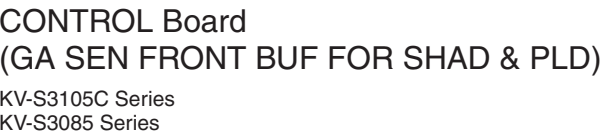
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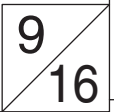


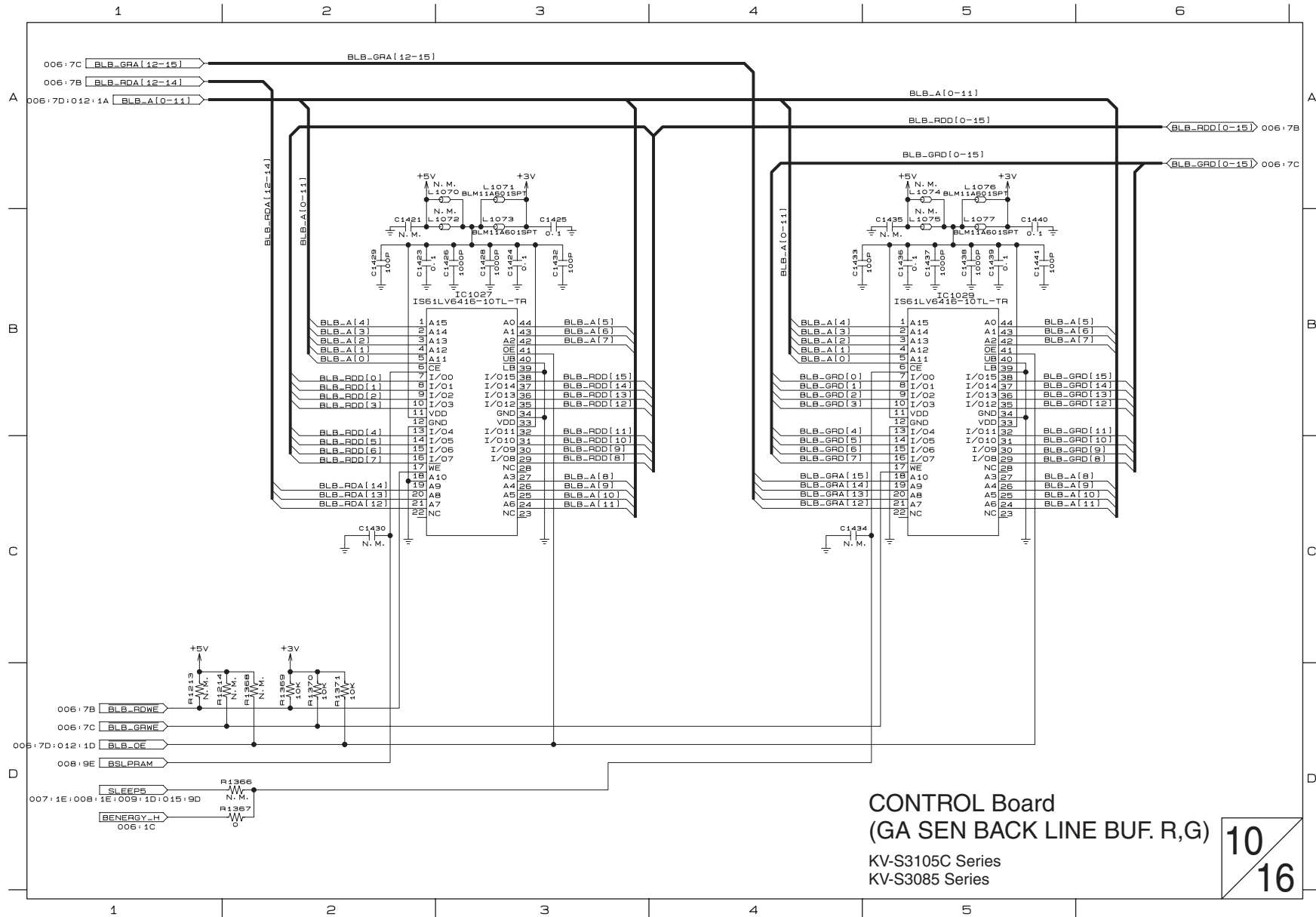


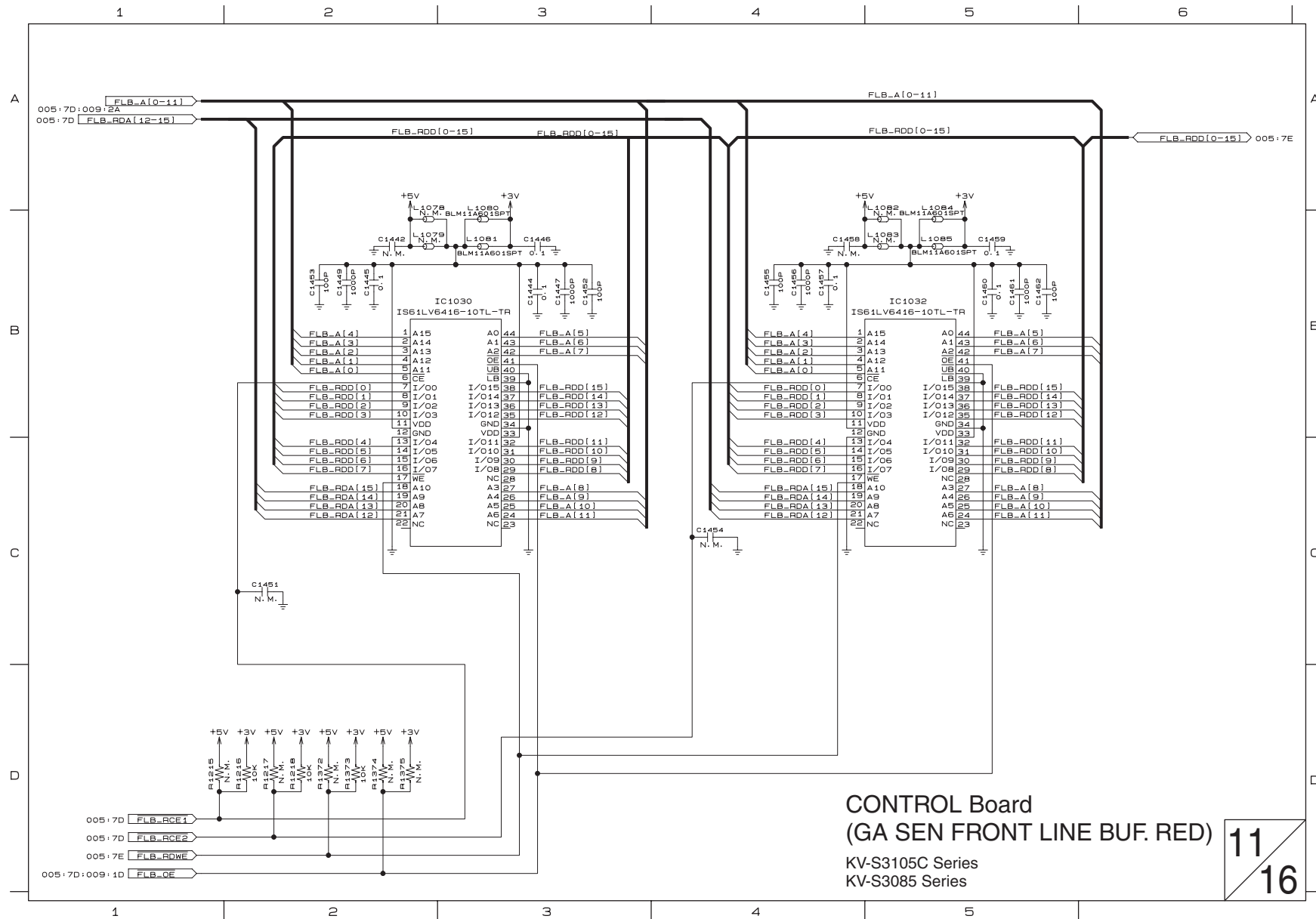


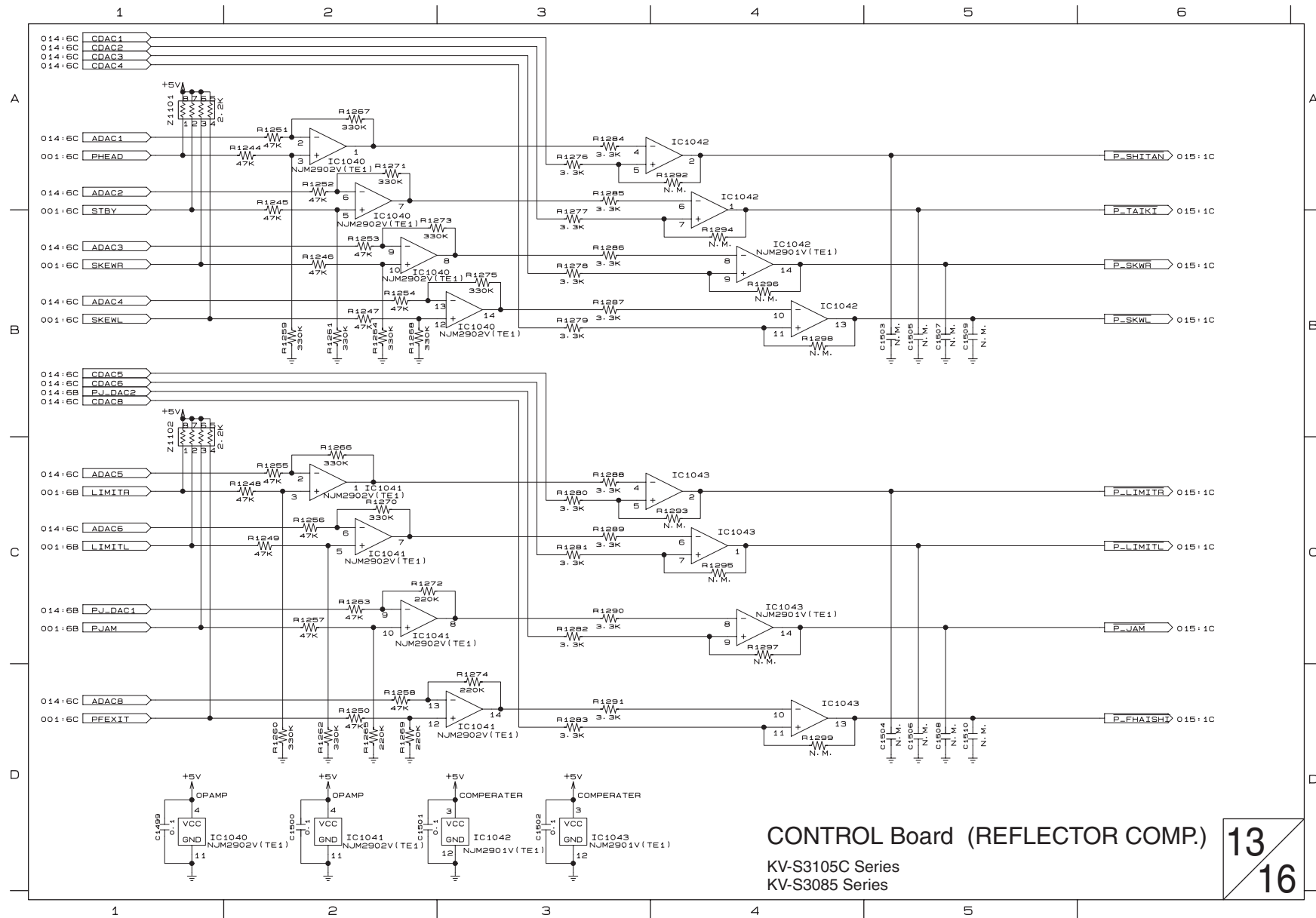


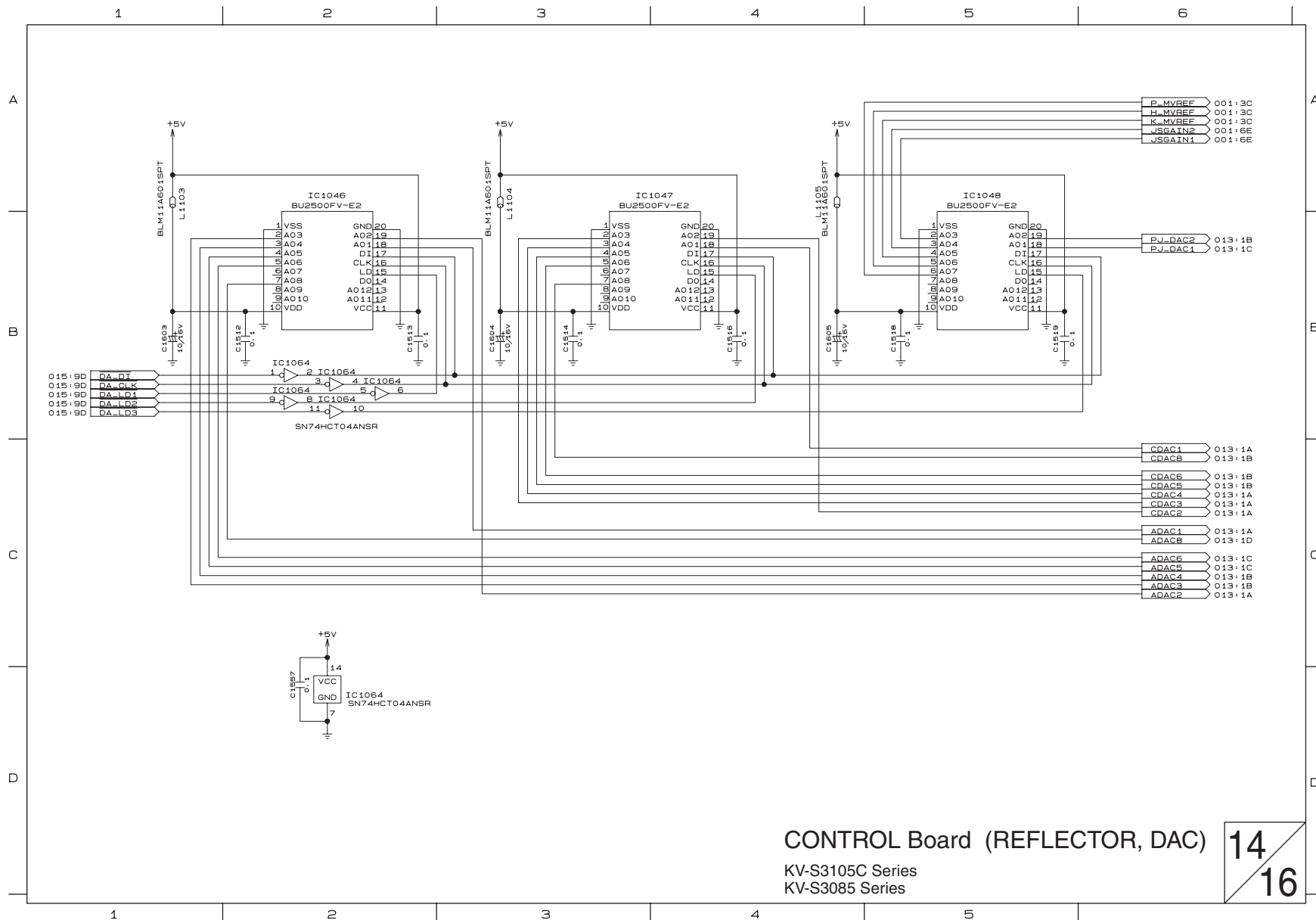


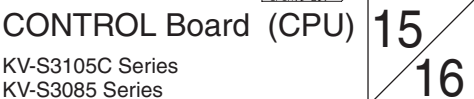






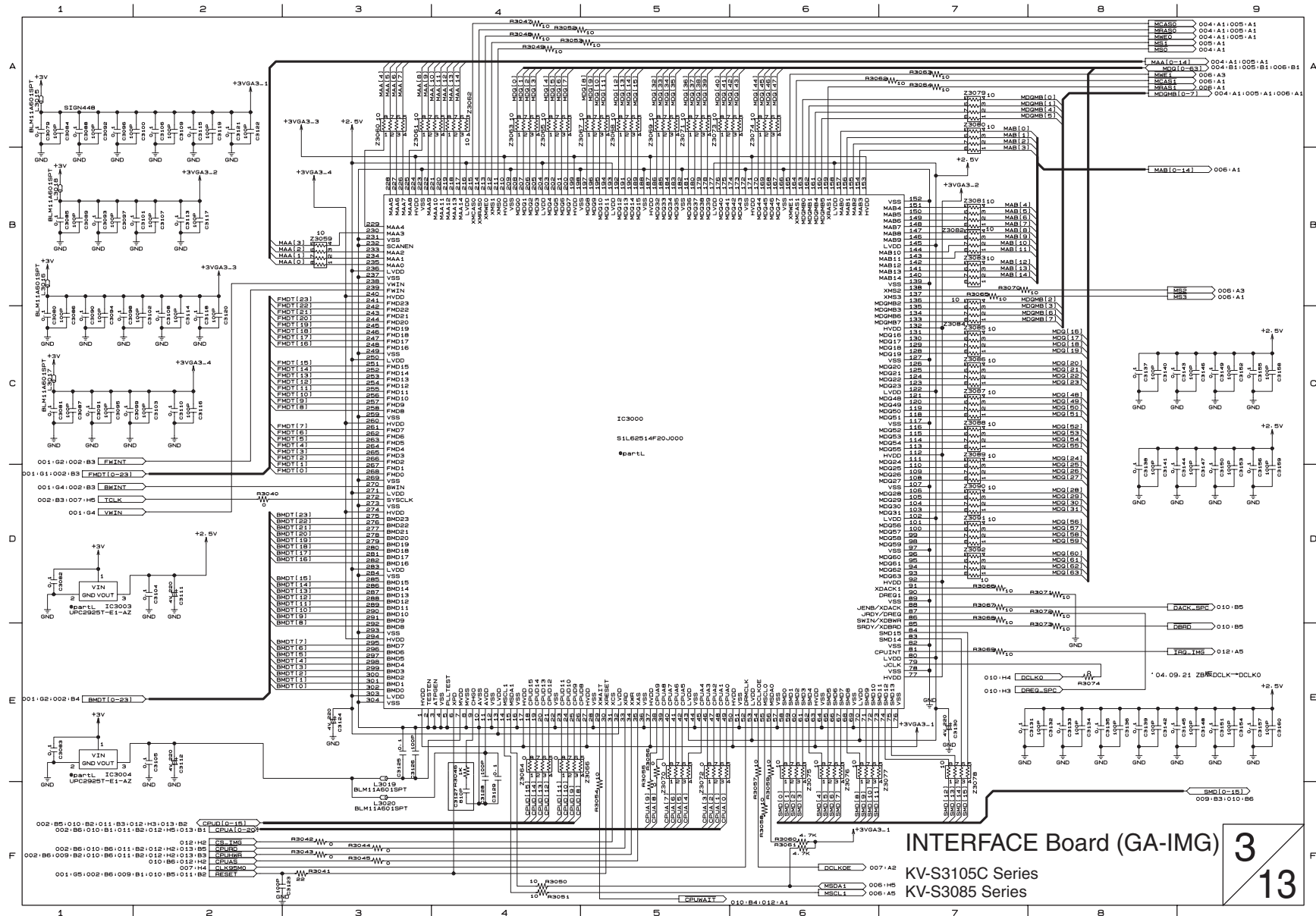


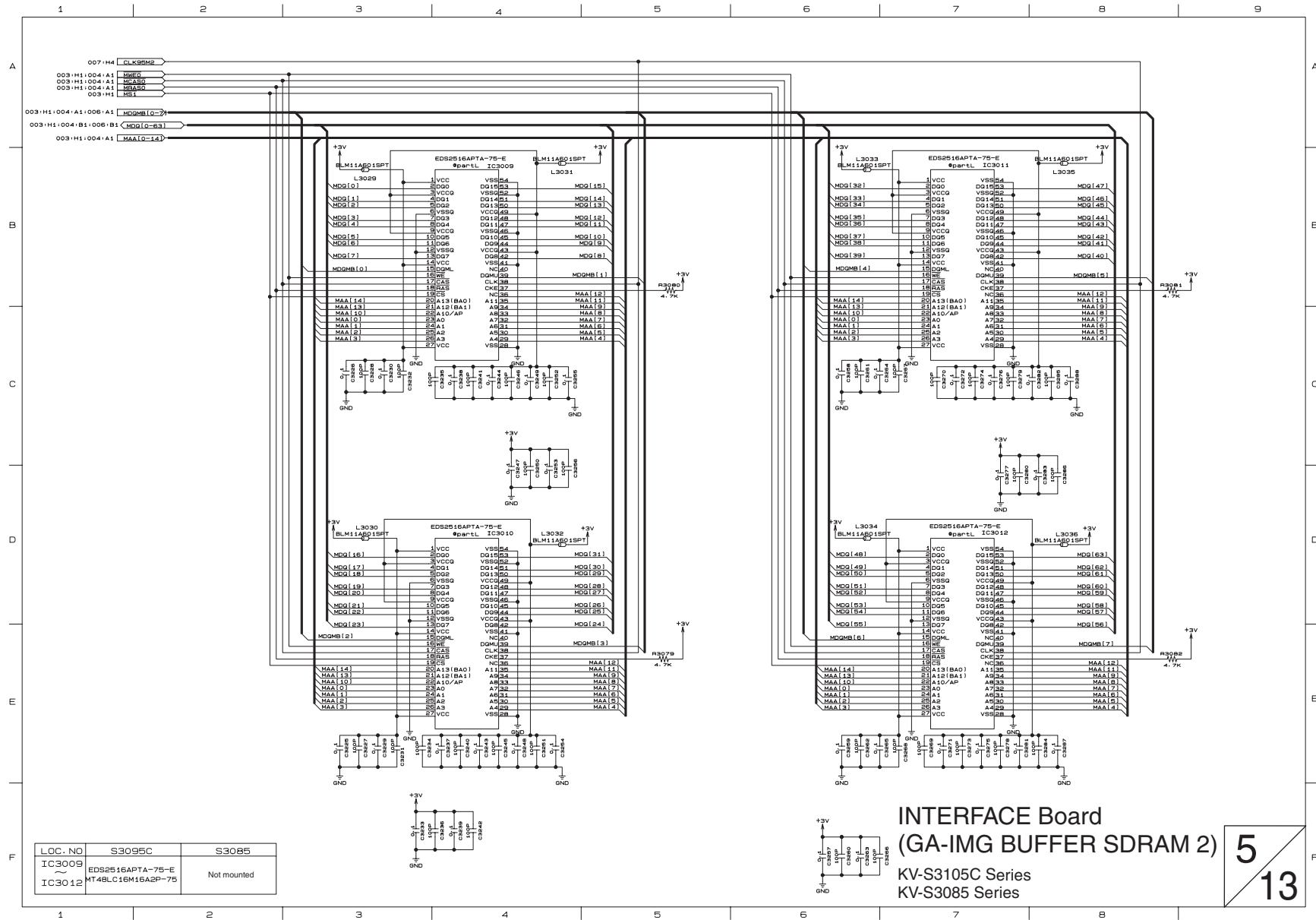




KV-S3105CSERIES / KV-S3085SERIES

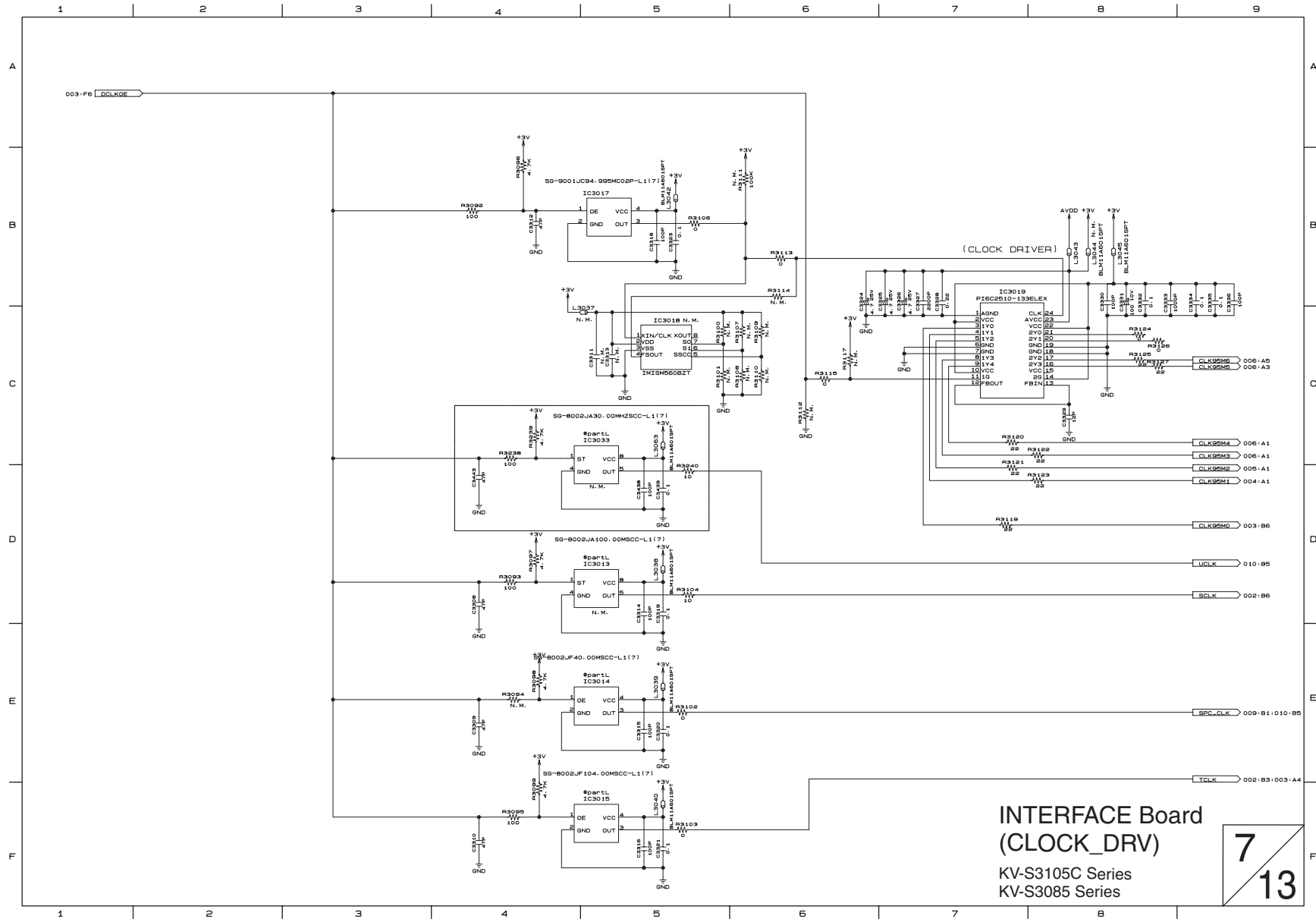


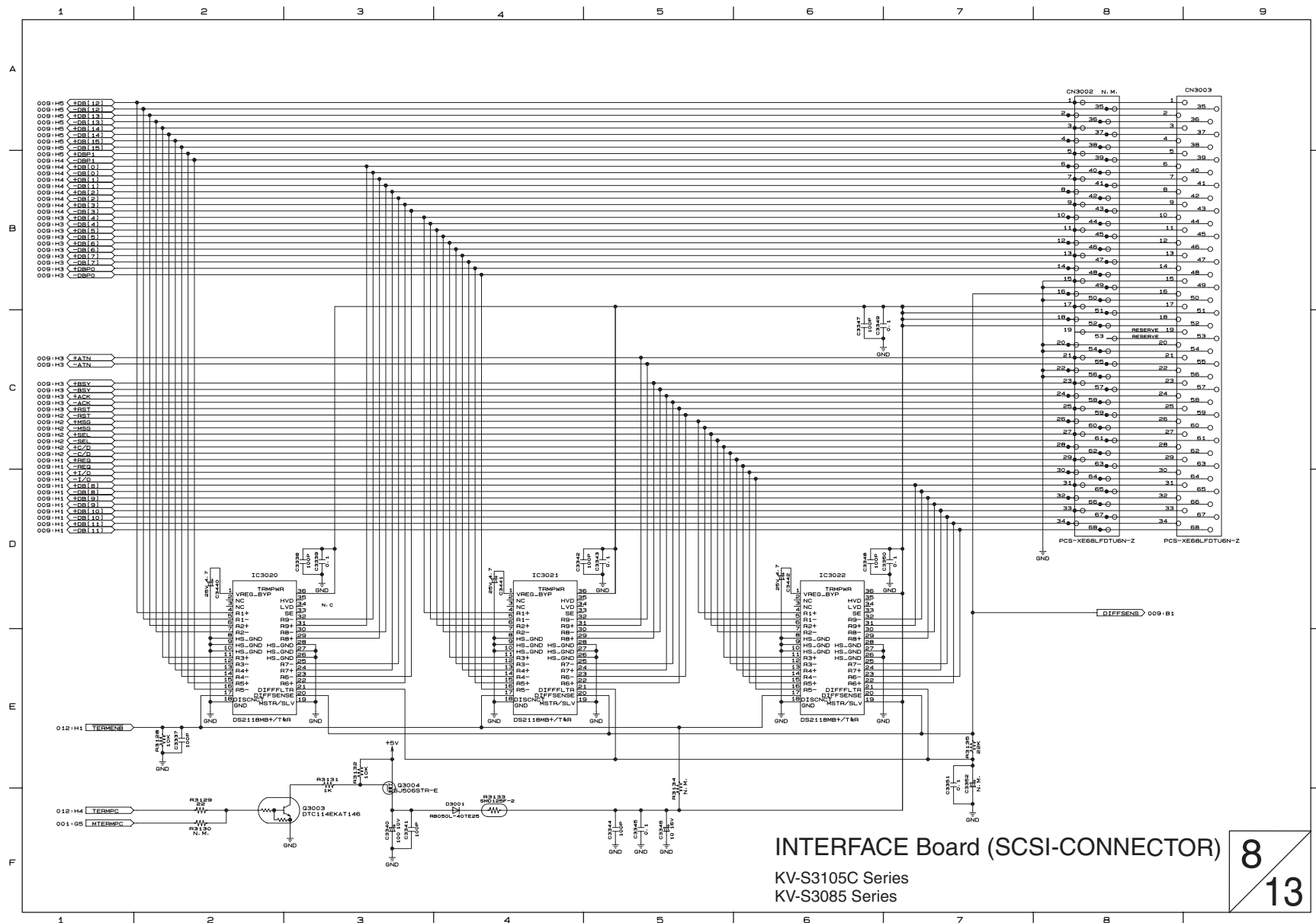


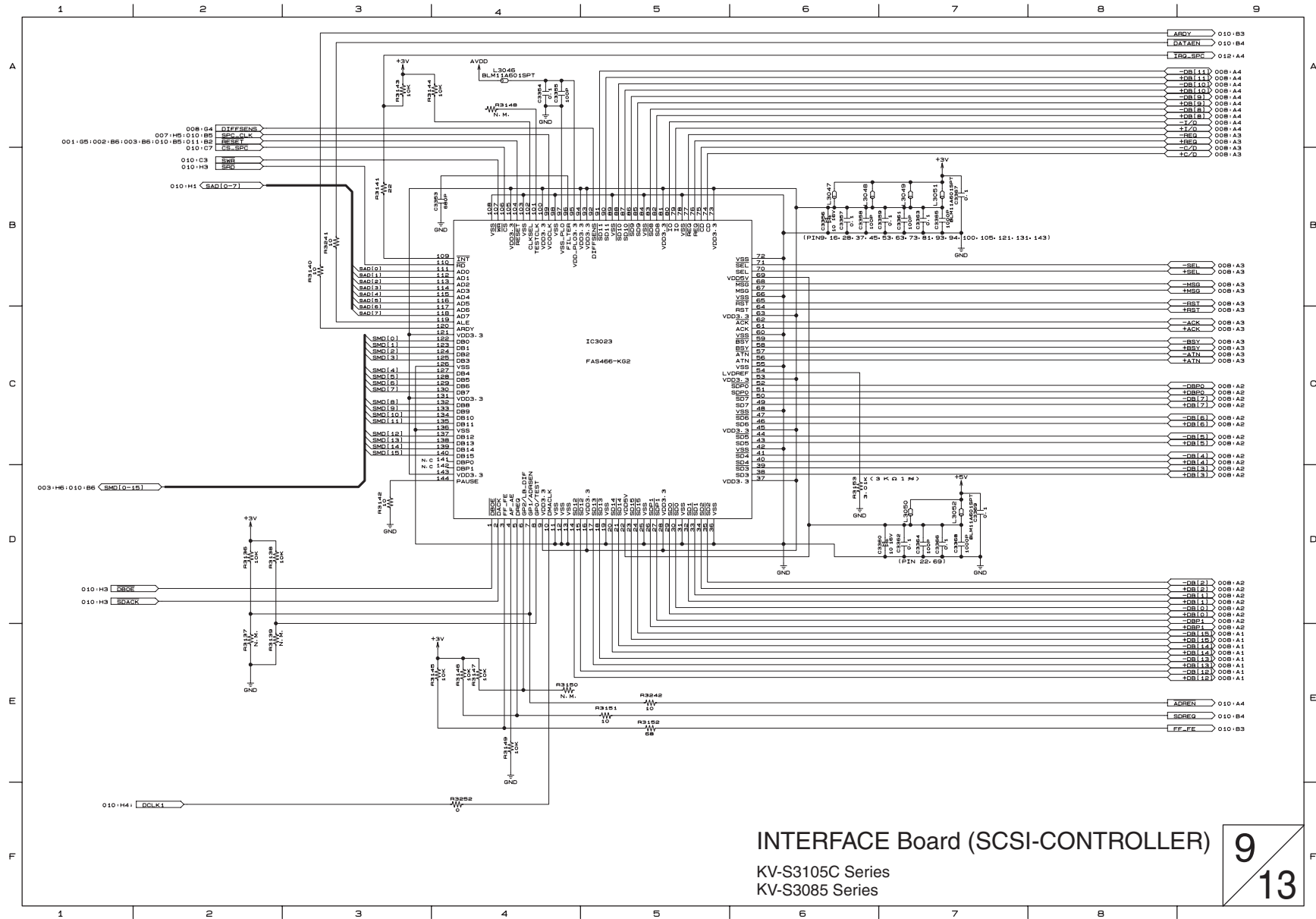


KV-S3105C Series
KV-S3085 Series

6	13
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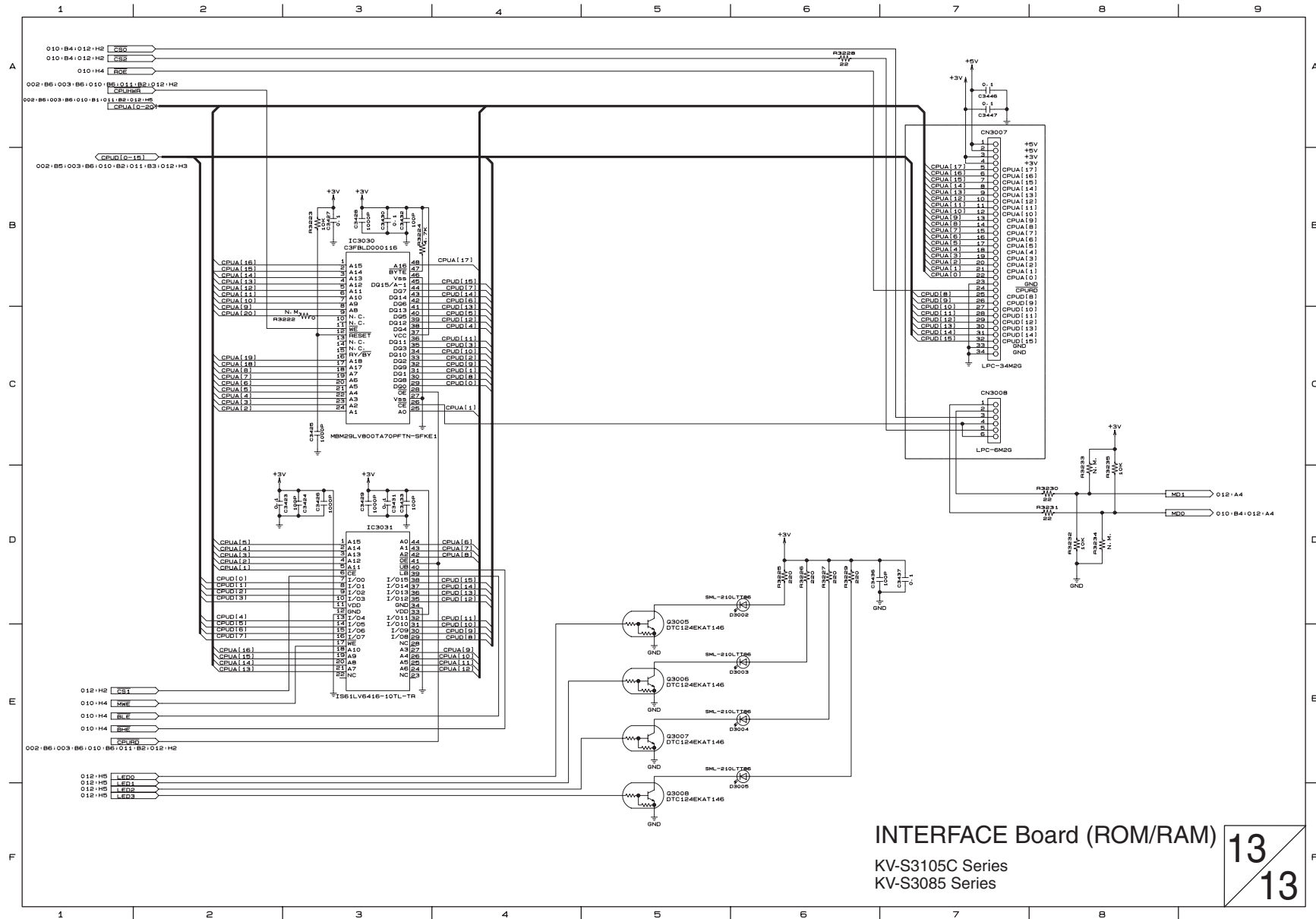




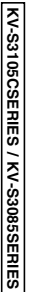


10/13



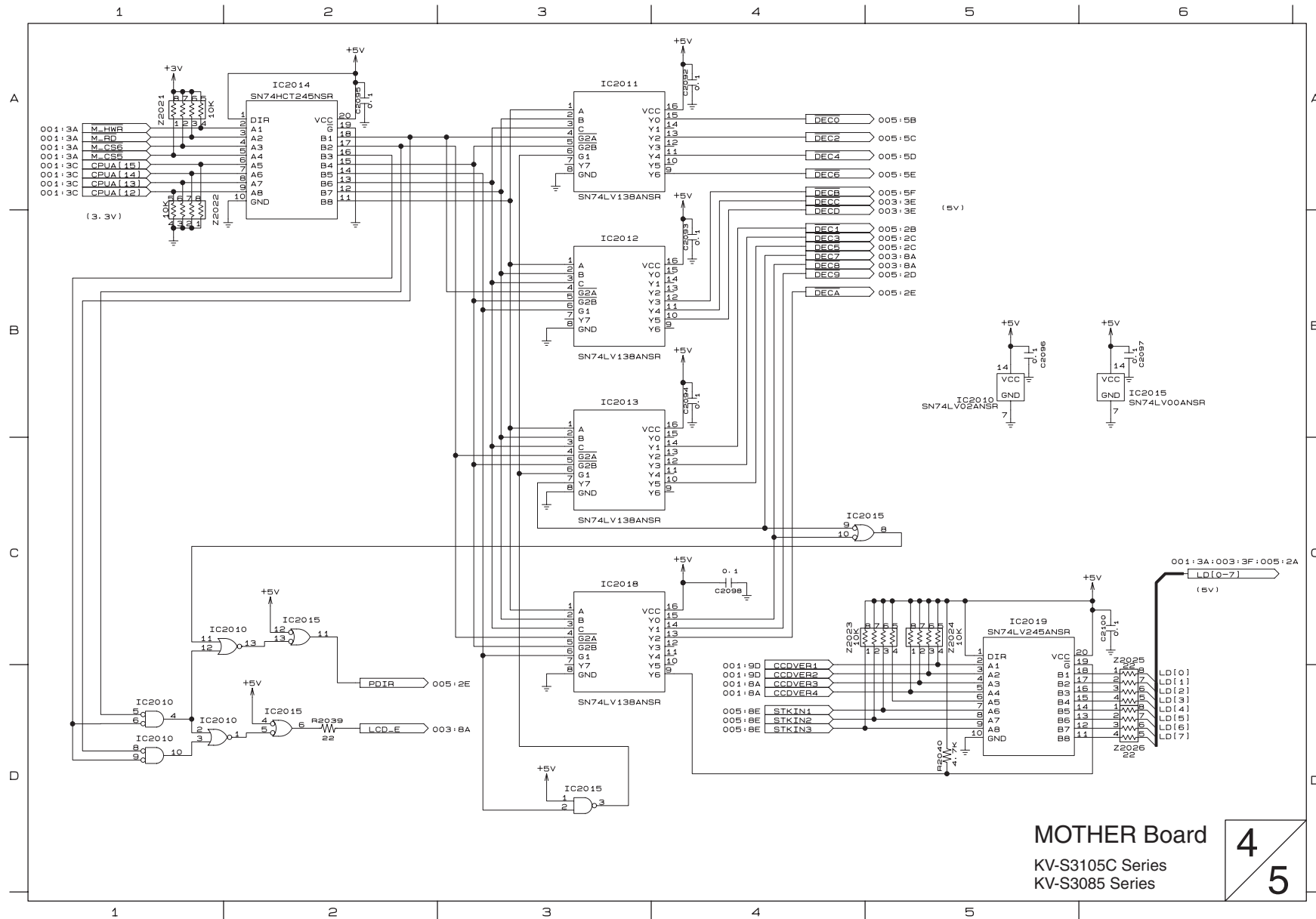


169



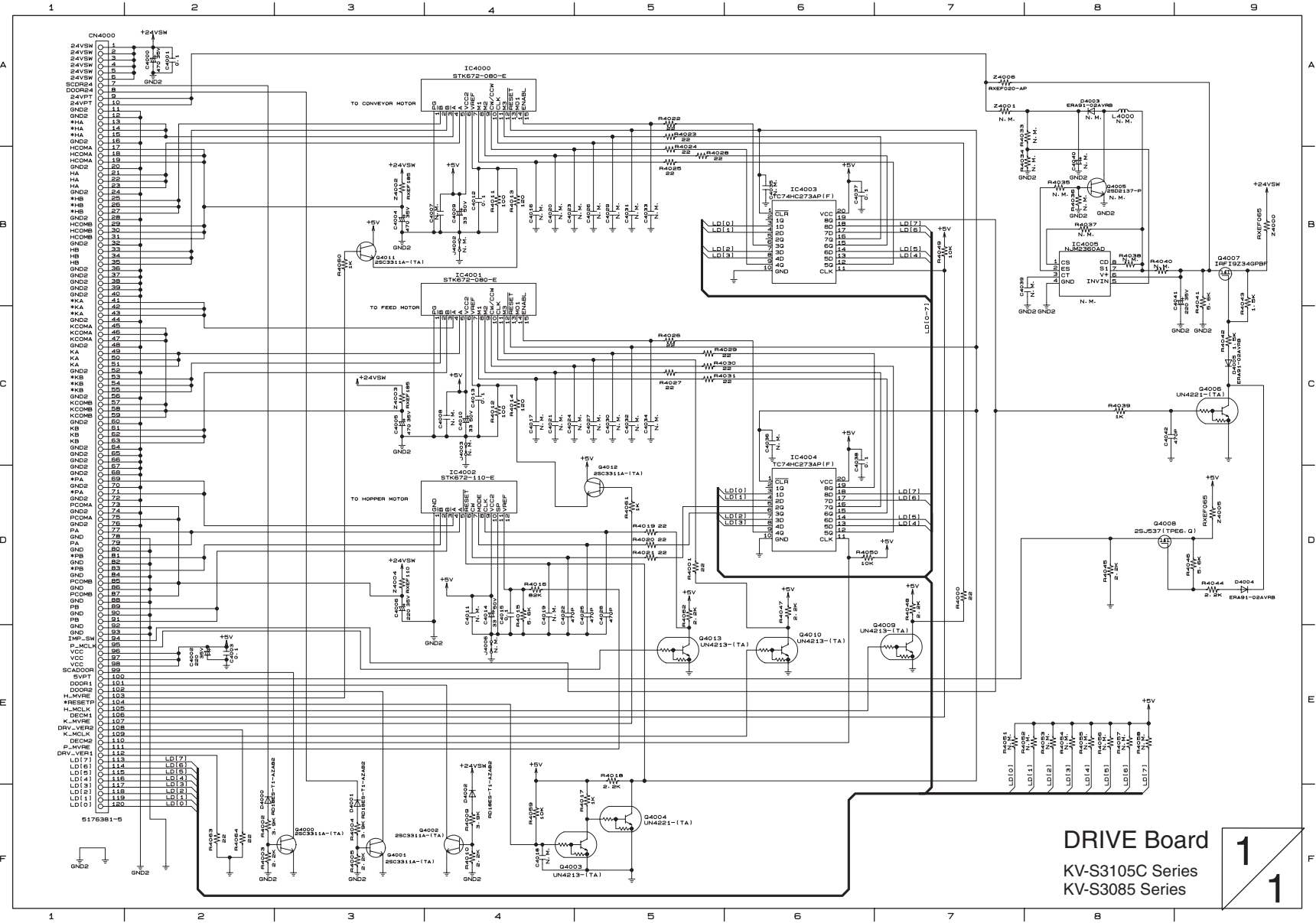






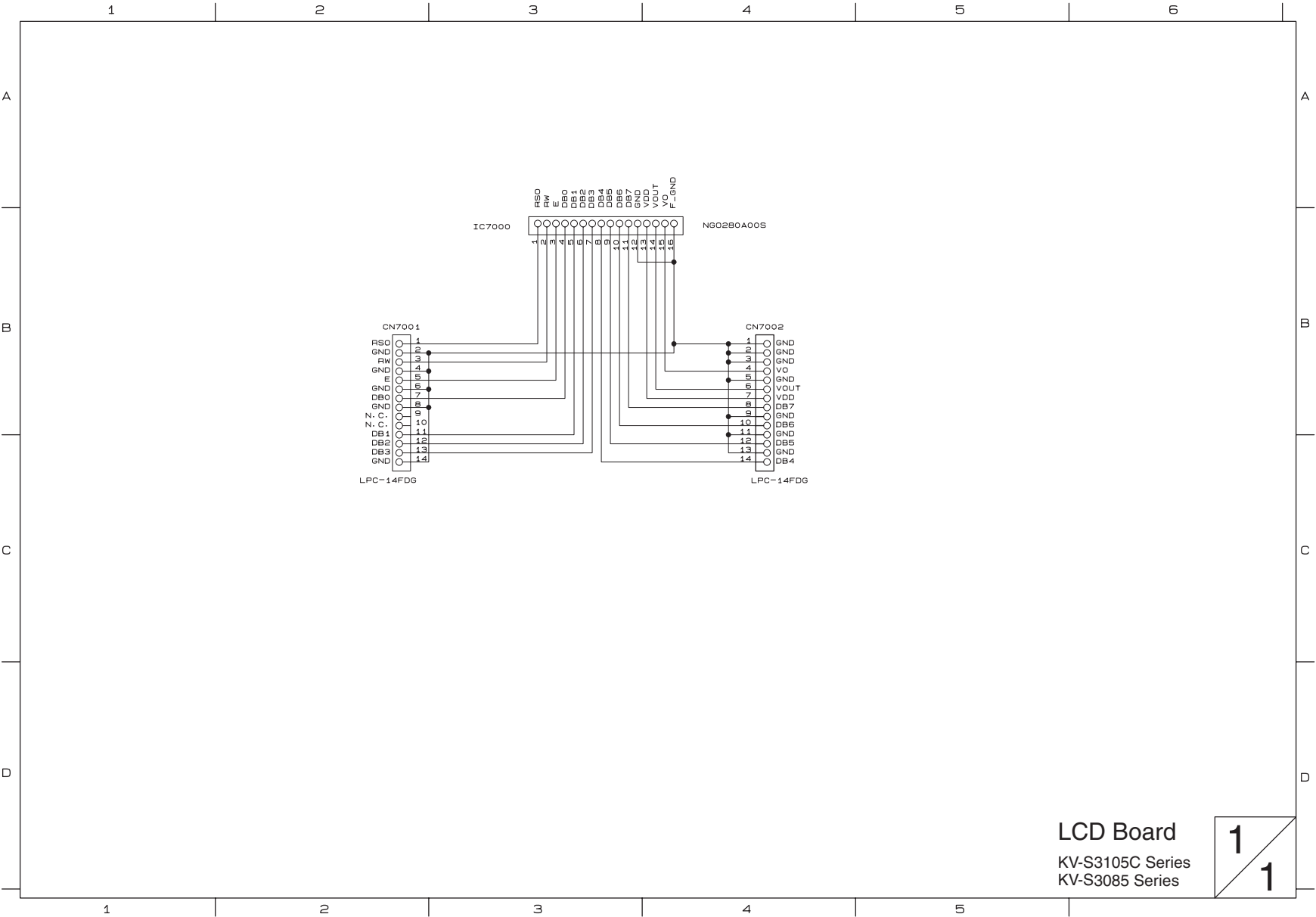
12.4. DRIVE Board

KV-S3105C SERIES / KV-S3085 SERIES



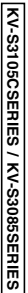
12.5. LCD Board

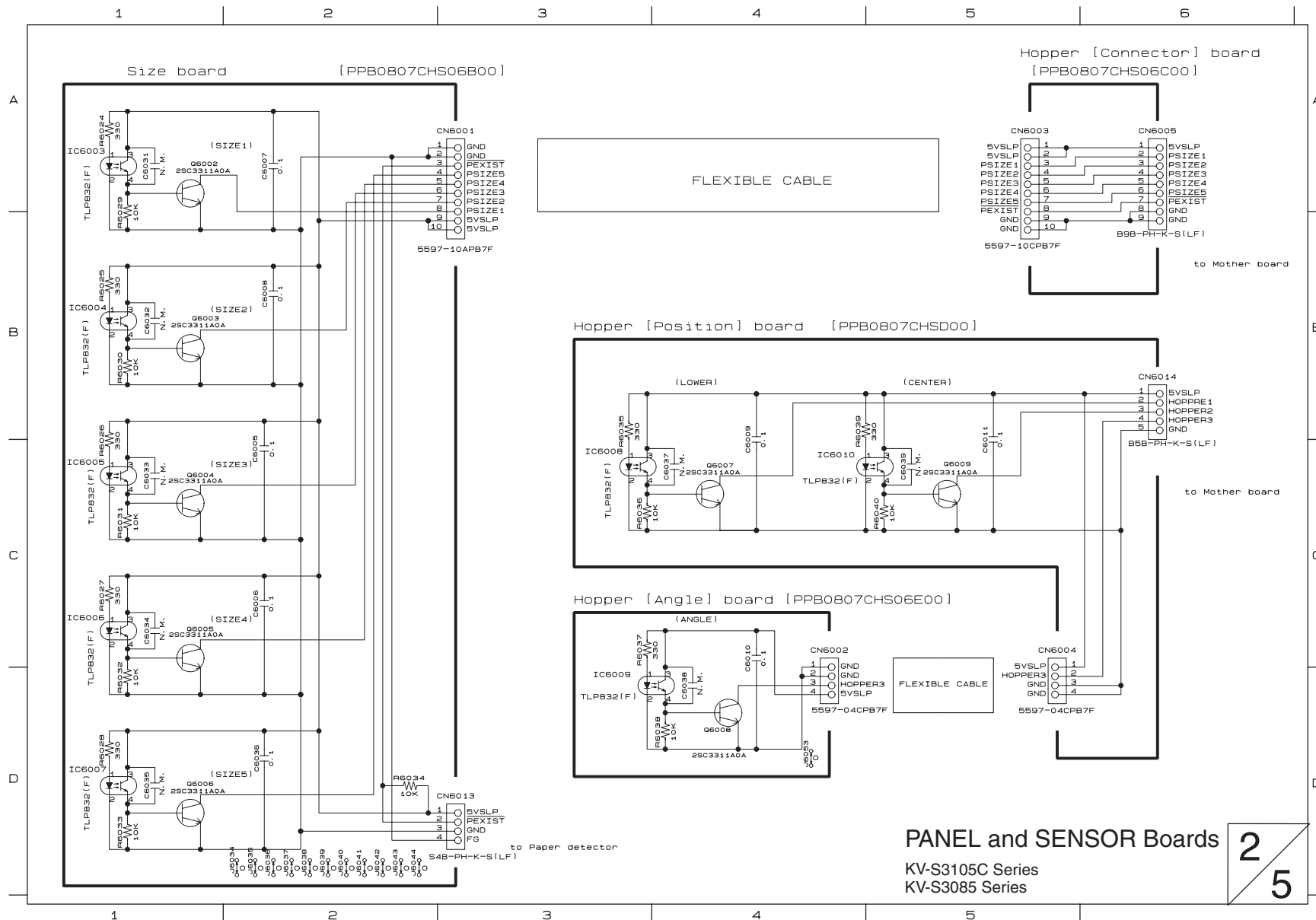
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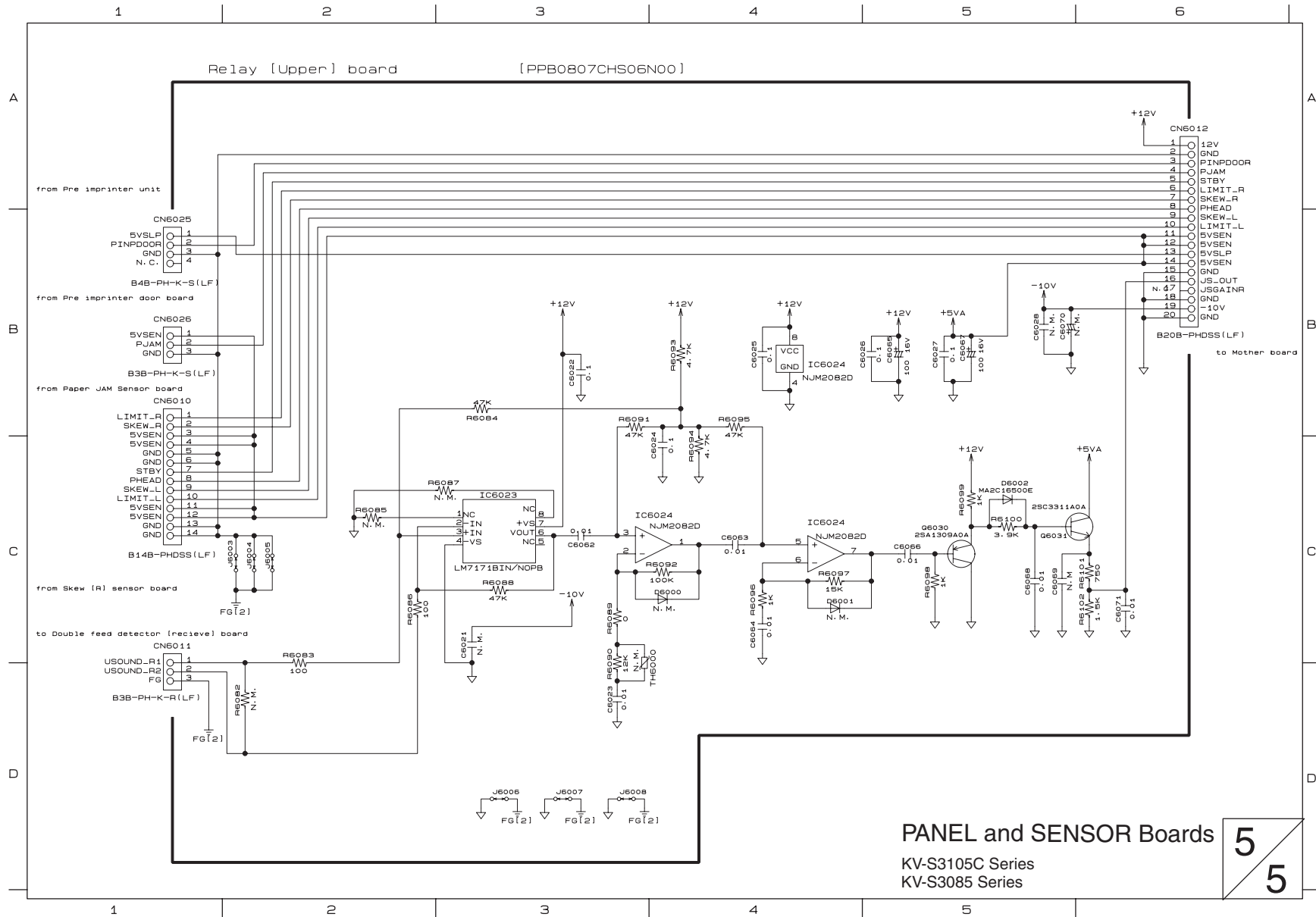
LCD Board
KV-S3105C Series
KV-S3085 Series

176









13 CIRCUIT BOARDS

Note: Distinction of PbF PCB

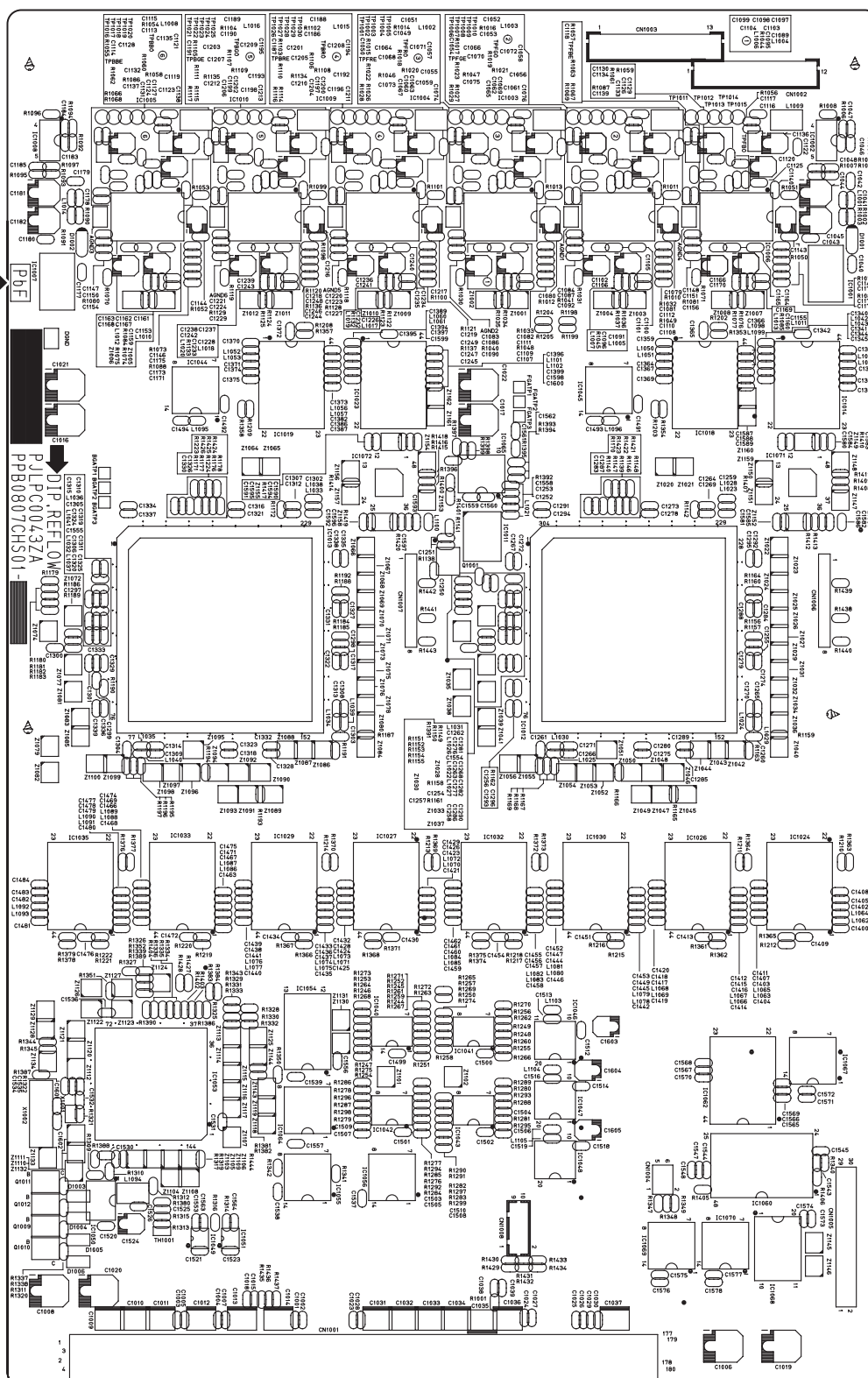
PCBs (manufactured) using lead free solder will have a PbF stamp on the PCB.

Index

- 13.1 CONTROL Board
- 13.2 INTERFACE Board
- 13.3 MOTHER Board
- 13.4 DRIVE Board
- 13.5 LCD Board
- 13.6 *PANEL Board
- 13.7 *SIZE Board
- 13.8 *HOPPER [CONNECTOR] Board
- 13.9 *HOPPER [POSITION] Board
- 13.10 *HOPPER [ANGLE] Board
- 13.11 *POINTER Board
- 13.12 *RELAY [LOWER] Board
- 13.13 *POST IMPRINTER DOOR Board
- 13.14 *EXIT [FRONT] Board
- 13.15 *SKEW [L] Board
- 13.16 *SKEW [R] Board
- 13.17 *JAM Board
- 13.18 *RETARD [POSITION] Board
- 13.19 *FAN RELAY 1 Board
- 13.20 *FAN RELAY 2 Board
- 13.21 *RELAY [UPPER] Board

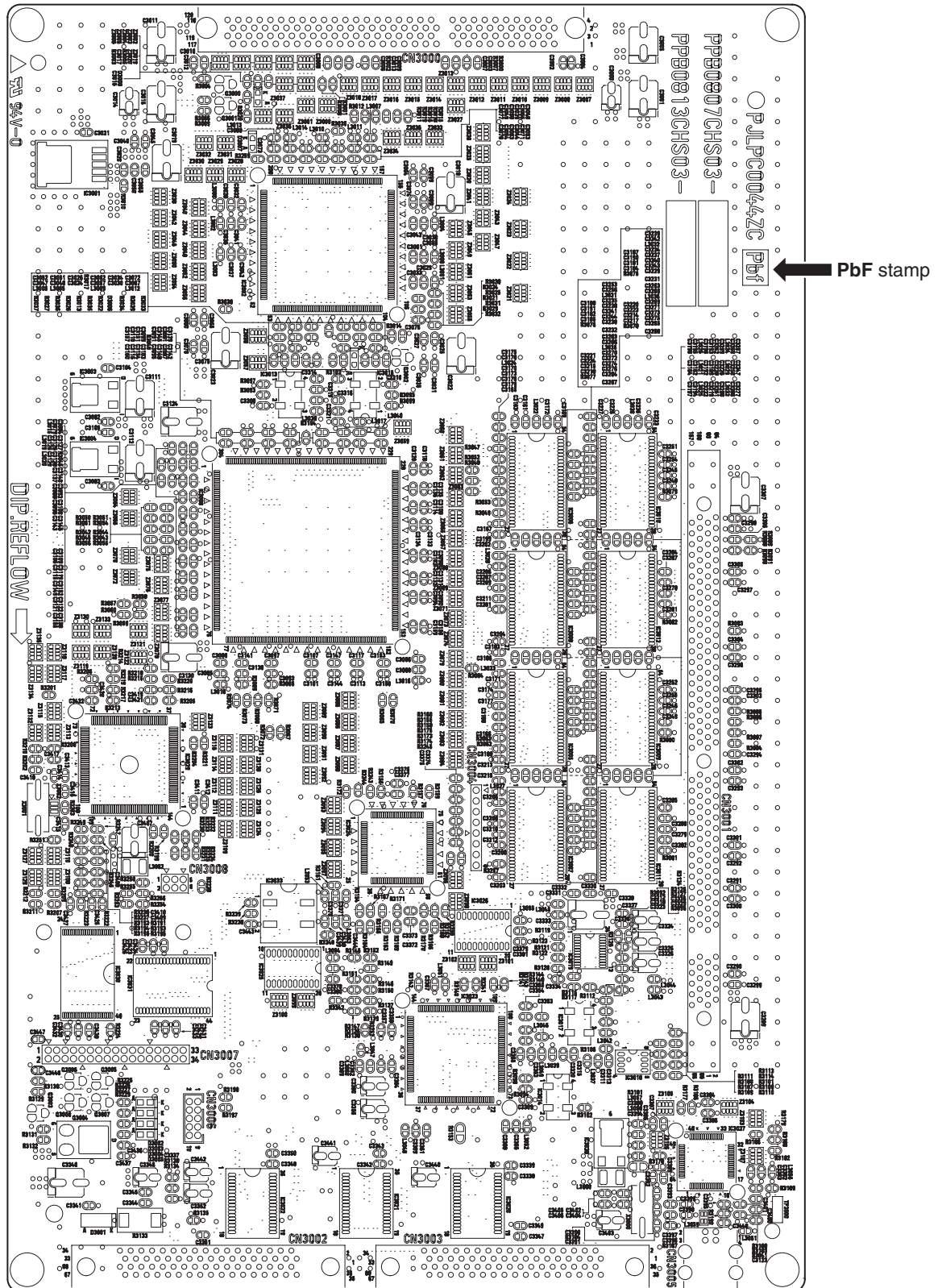
Note: *

Add 6000 to each part number with silk printed to identify the actual part number.



Reducing to 70%.

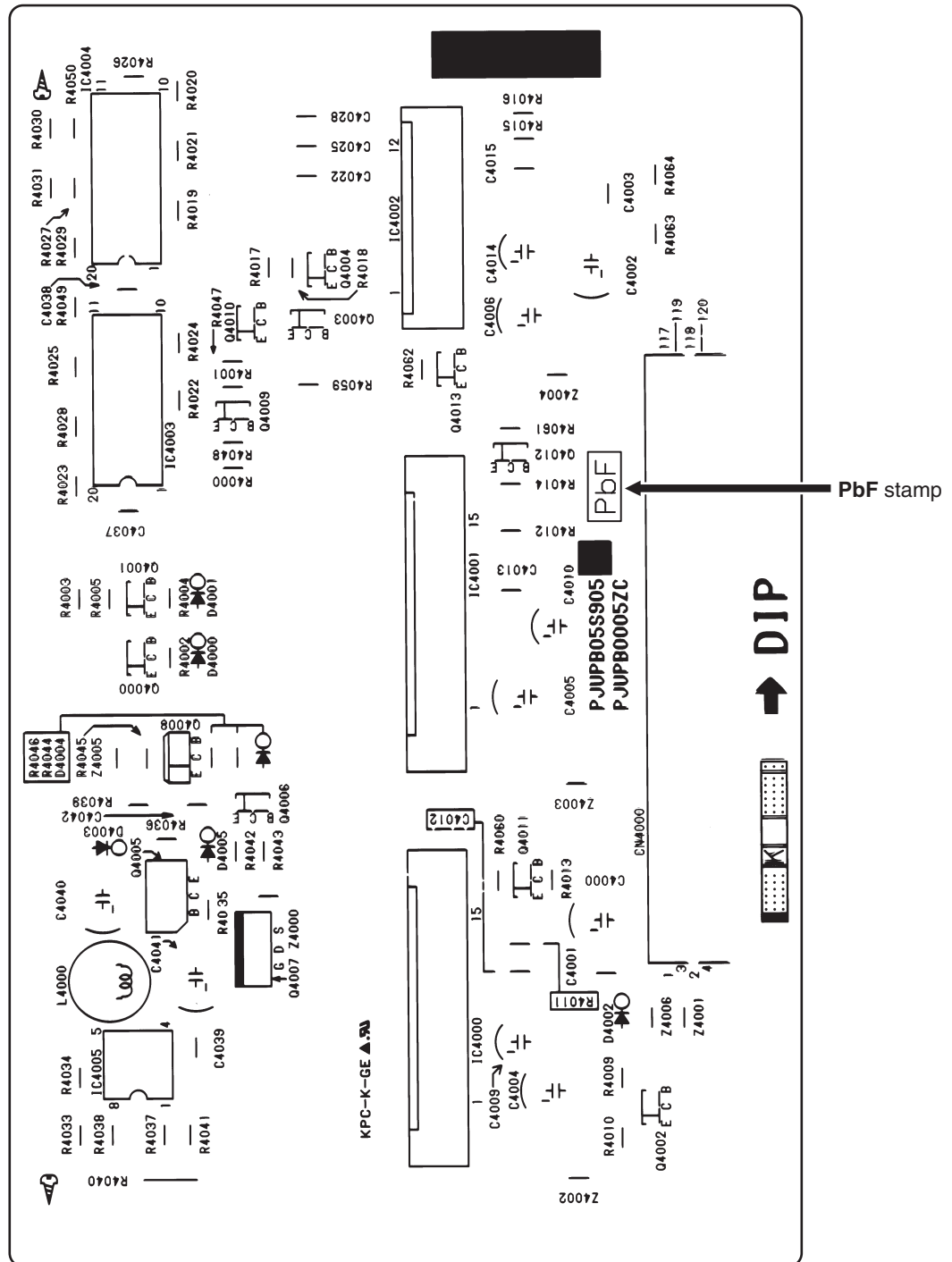
13.2. INTERFACE Board



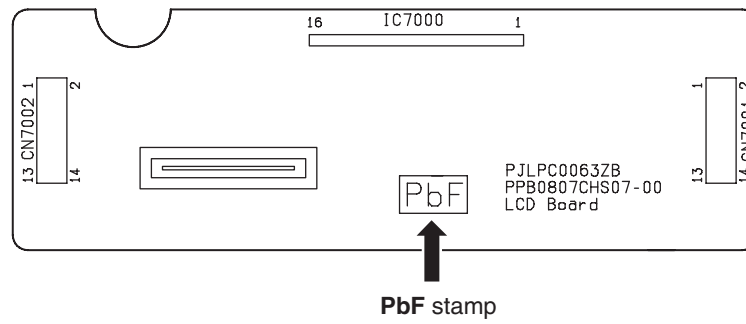
Reducing to 70%.



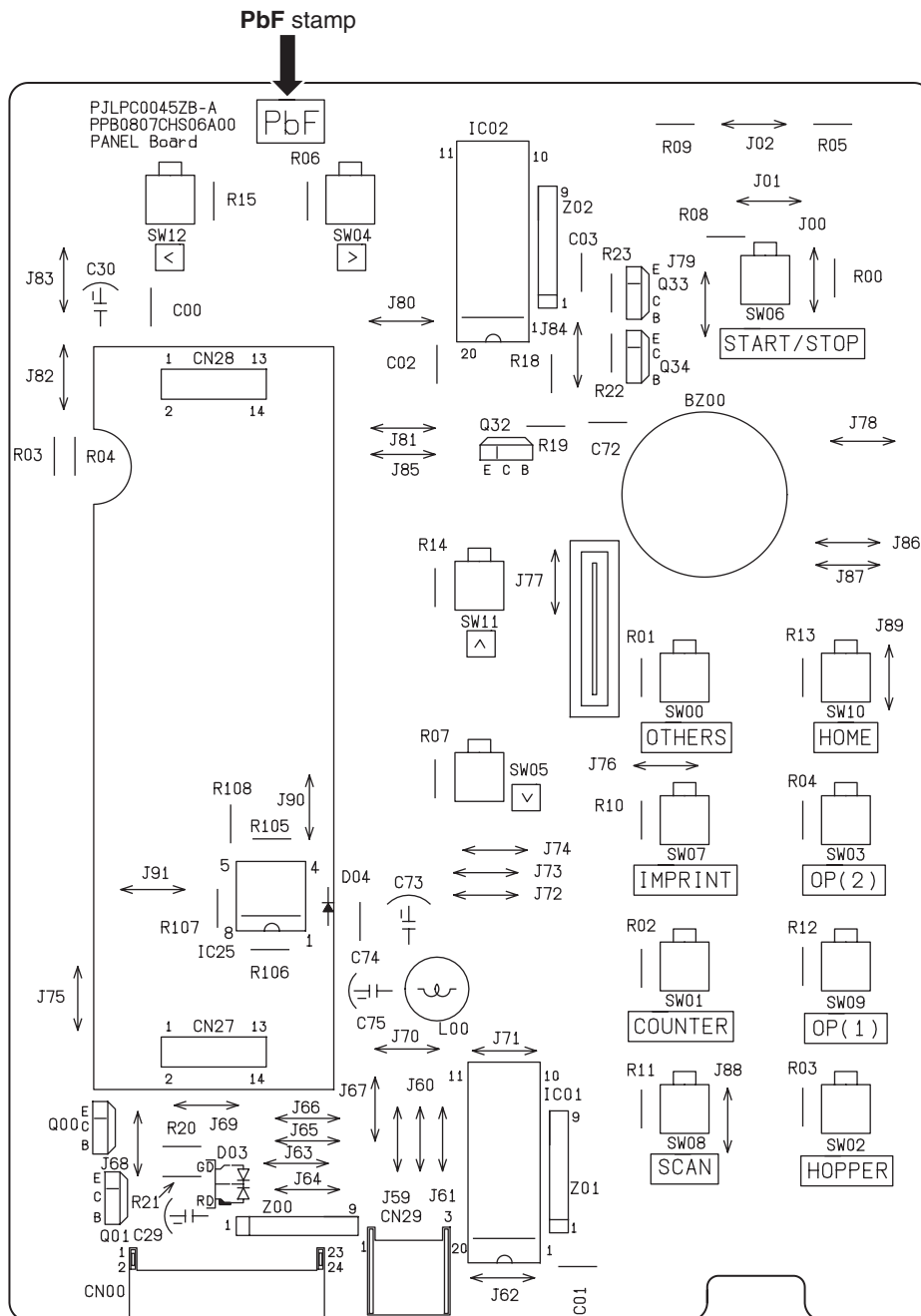
13.4. DRIVE Board



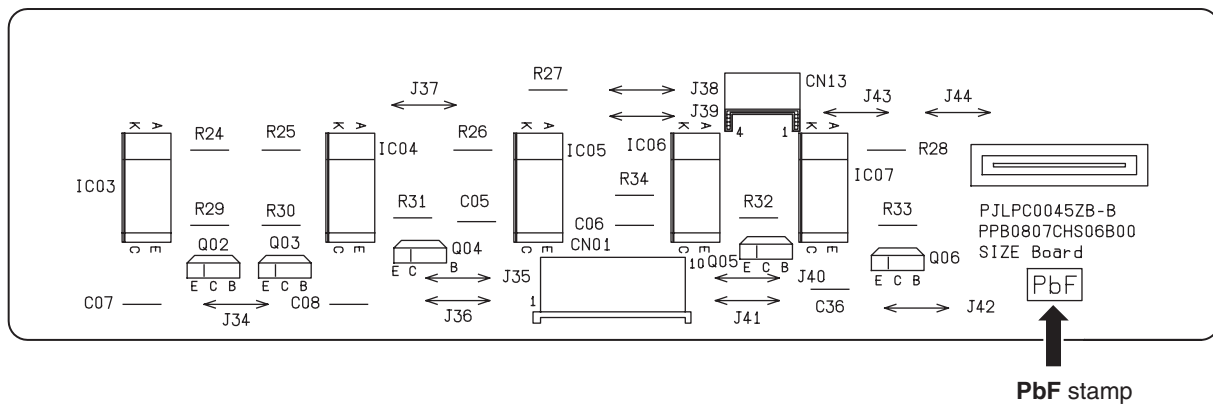
13.5. LCD Board



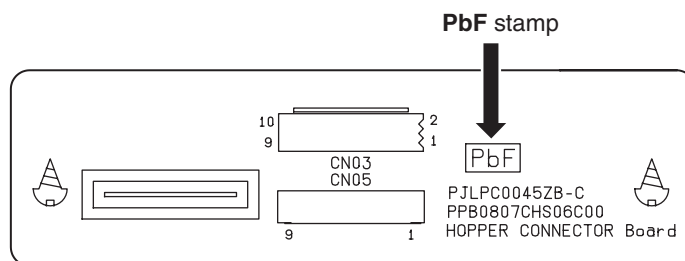
13.6. PANEL Board



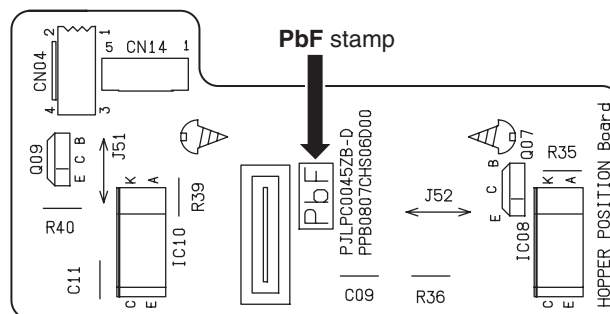
13.7. SIZE Board



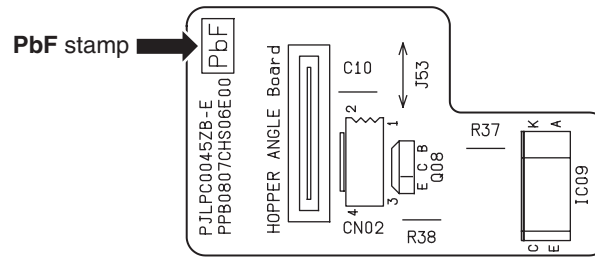
13.8. HOPPER [CONNECTOR] Board



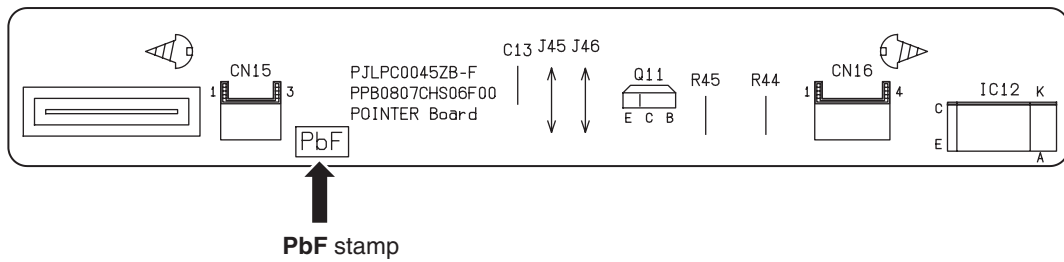
13.9. HOPPER [POSITION] Board



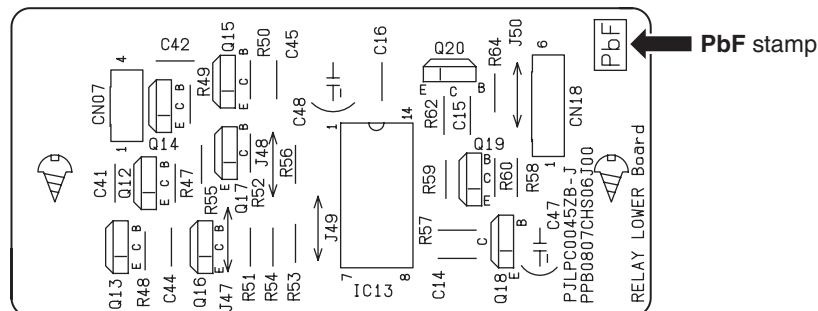
13.10. HOPPER [ANGLE] Board



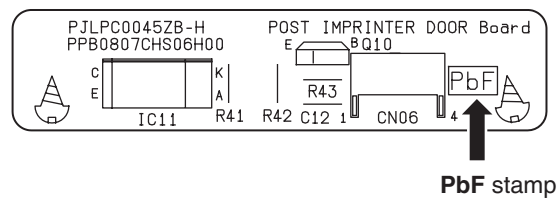
13.11. POINTER Board



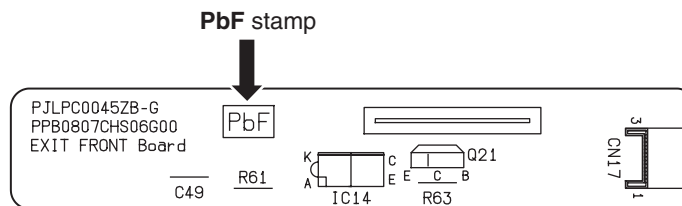
13.12. RELAY [LOWER] Board



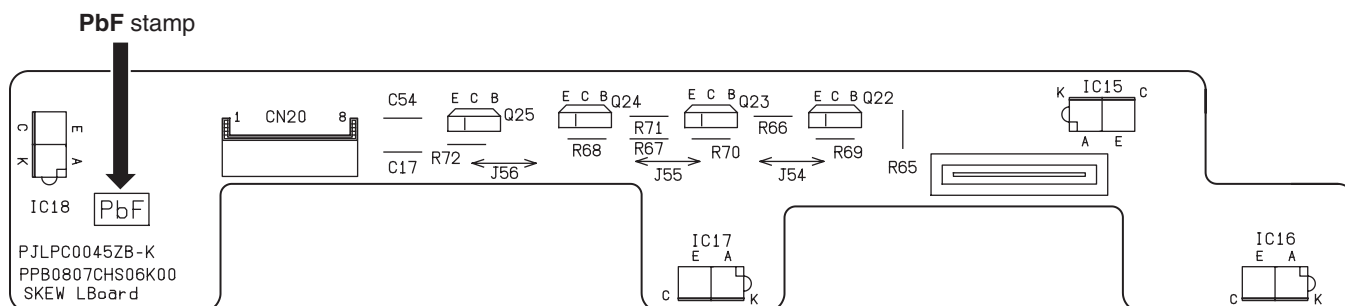
13.13. POST IMPRINTER DOOR Board



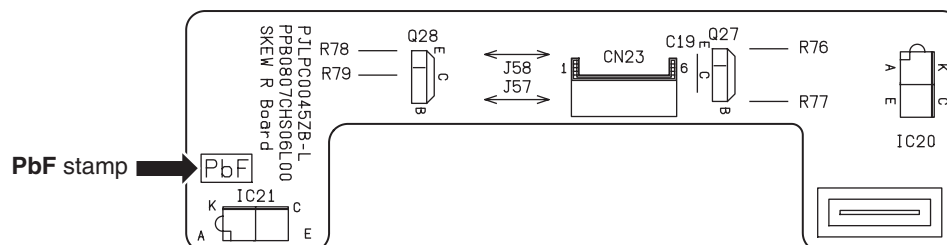
13.14. EXIT [FRONT] Board



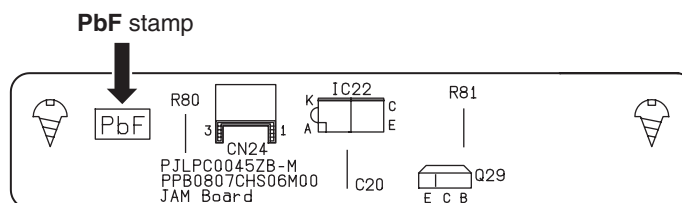
13.15. SKEW [L] Board



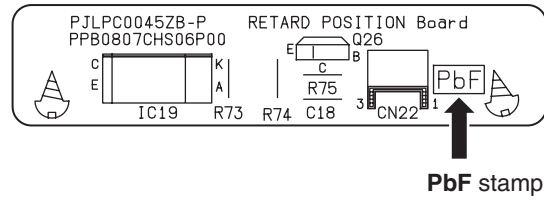
13.16. SKEW [R] Board



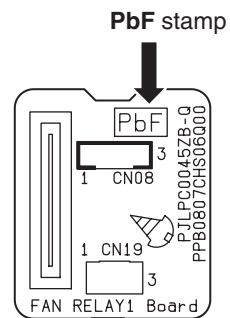
13.17. JAM Board



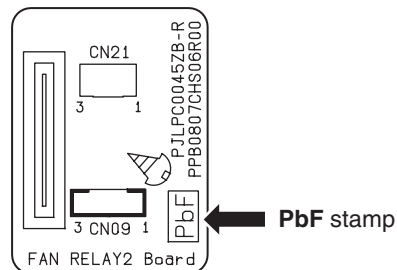
13.18. RETARD [POSITION] Board

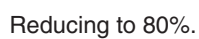


13.19. FAN RELAY 1 Board



13.20. FAN RELAY 2 Board





14 PARTS LOCATION AND MECHANICAL PARTS LIST

IMPORTANT SAFETY NOTICE

Components identified by  mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

Note: RTL (Retention Time Limited)

The mark (RTL) indicates that the Retention Time is limited for this item. After the discontinuations of this assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.

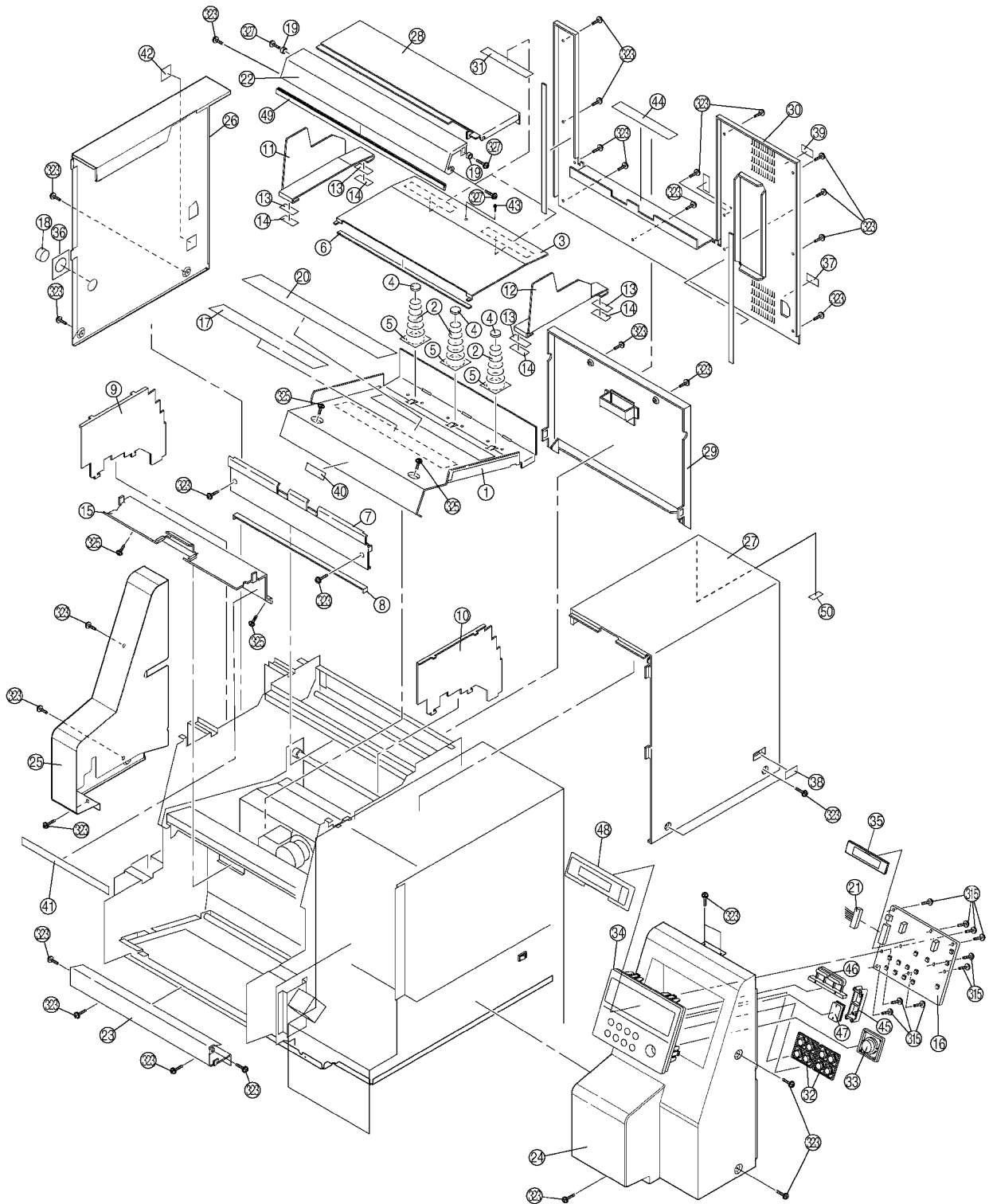
Note: TSCA (Toxic Substance Control Act)

The marking (TSCA) in the Remark column indicates that the part shown in the column consist of the substances which are included in TSCA inventory.

Note: PbF (Pb Free)

“PbF” in the Remark column means Pb Free solder is used to assemble parts on the PCB assembly.

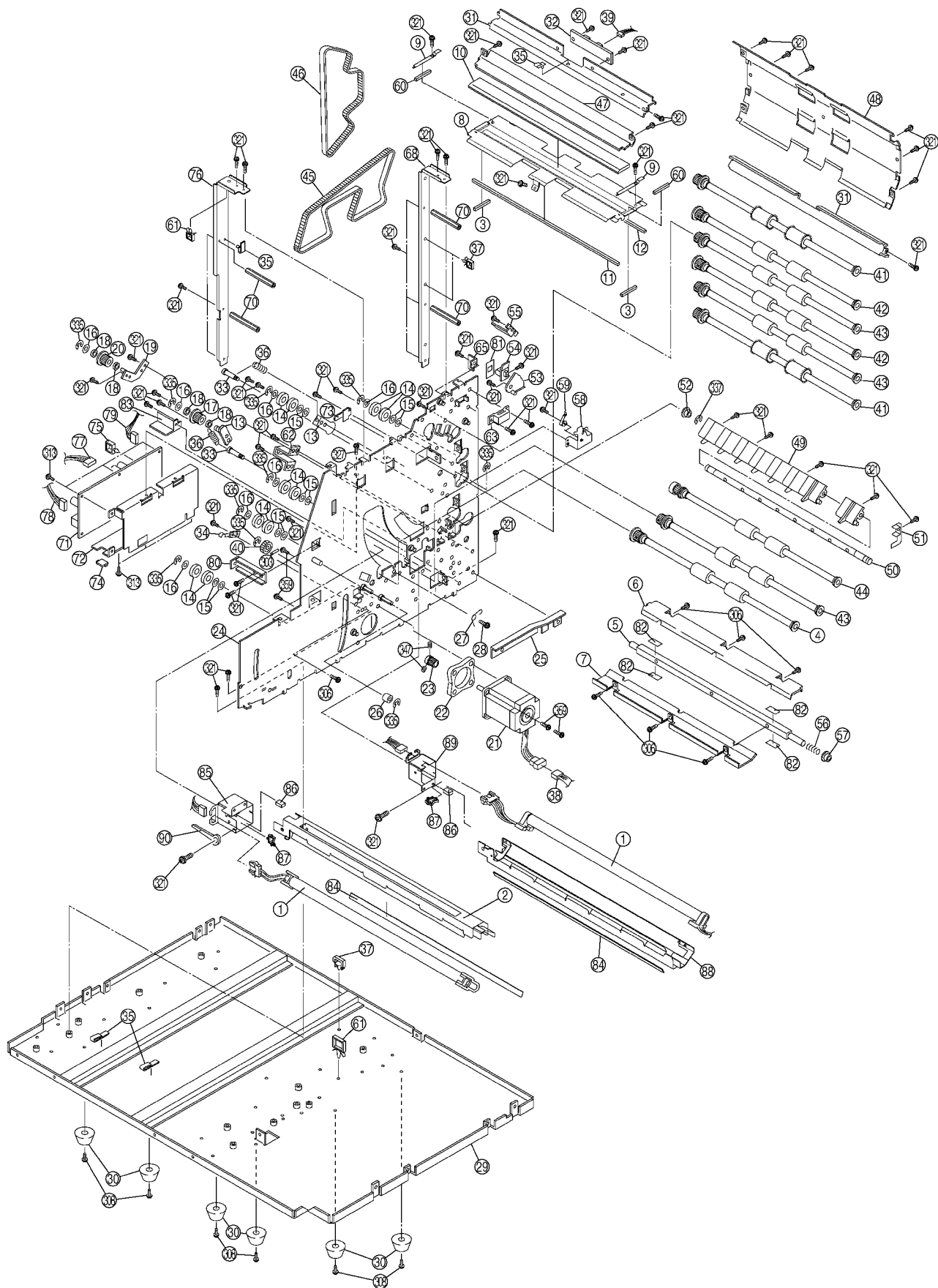
14.1. Exterior



REPLACEMENT MECHANICAL PARTS LIST (Exterior)

Ref. No.	Part No.	Part Name & Description	Remarks
1	PJKAB0004Y	Stacker Base	
2	PJDSB0115Z	Stacker Spring	
3	PJKAB0015Z	Oscillate Plate	
4	PBHRA0152Z	Oscillate Stopper	
5	PBHRA0163Z	Stacker Spring Support	
6	PJHEB0020Z	Oscillate Sheet1	ISO: PE/PS
7	PJKAC0011Z	Stacker Panel	
8	PBHRA0151Z	Oscillate Stopper	
9	PJKAB0002Y	Inner Panel (L)	
10	PJKAB0001Y	Inner Panel (R)	
11	PJMDB0082Z	Stacker Guide (L)	
12	PJMDB0083Z	Stacker Guide (R)	
13	PJHEB0018Z	Stacker Guide Sheet1	ISO: PE
14	PJHEB0019Z	Stacker Guide Sheet2	ISO: PE
15	PJKAB0003Y	Stacker Bottom Cover	
16	PJWP08070M	PANEL Board	(RTL)
17	PBHRA0169Z	Oscillate Sheet	
18	PBHRA0183Z-1	Paper Thick Knob	ISO: ABS
19	PBDEA0096Y	Top Cover Spacer	
20	PJHEB0028Z	Stacker Cover	ISO: PC
21	PJJRB0638Z	Panel Cable	
22	PBKAA0023X	Top Cover	
23	PBKAA0024X	Hopper Cover	
24	PJKAC0003Z	Front Panel (R)	
25	PJKAC0006Z	Front Panel (L)	
26	PJKAC0009Z	Side Panel (L)	
27	PJKAB0010Y	Side Panel (R)	
28	PBKAX0022X	Numbering Cover	
29	PBKAX0025X	Door Cover	
30	PJKAB0013Y	Rear Panel	
31	PJHEB0021Z	Oscillate Plate Sheet	ISO: PE/PS
32	PBBCA0010X	Hinge Button (A)	ISO: ABS
33	PBBCA0011Z-1	Hinge Button (B)	ISO: ABS
34	PJGKB0001Z-1	Switch Panel for KV-S3105C Series	ISO: ABS/PC
34	PJGKB0001Y-1	Switch Panel for KV-S3085 Series	
35	PJWP08071M	LCD Board	(RTL)
36	PJQTB0051Z	ADF Label	
37	PBQAA0652Y	AC IN Label	
38	PBQAA0653Y	Power Label	
39	PBQAA0654Y	I/F Label	
40	PBQAA0655Y	Pull Open Label	
41	PJQTB0047Z	Paper Feed Roller Label	
42	PJQTB0052Z	Pointer Label	
43	VJF0036	Rivet	
44	PBQAA0922Z	Roller Caution Label (Except for China)	
44	PJQTB0250Z	Roller Caution Label (Only for China)	
45	PBBCA0012Z-2	Hinge Button (C)	ISO: ABS
46	PBBCA0013Z-2	Hinge Button (D)	ISO: ABS
47	PBBCA0014Z-2	Seesaw Button	ISO: ABS
48	PJGAC0007Z	Switch Panel Sheet	
49	CE-016-L340	Edging	
50	PJRA0007Z	Shield Gasket	
315	XTW3+U10PFJ	Screw	
323	XTW3+U6LFJ	Screw	
325	XTW3+U6LFJK	Screw	
327	XTW3+U8LFJ	Screw	

14.2. Chassis and Base 1

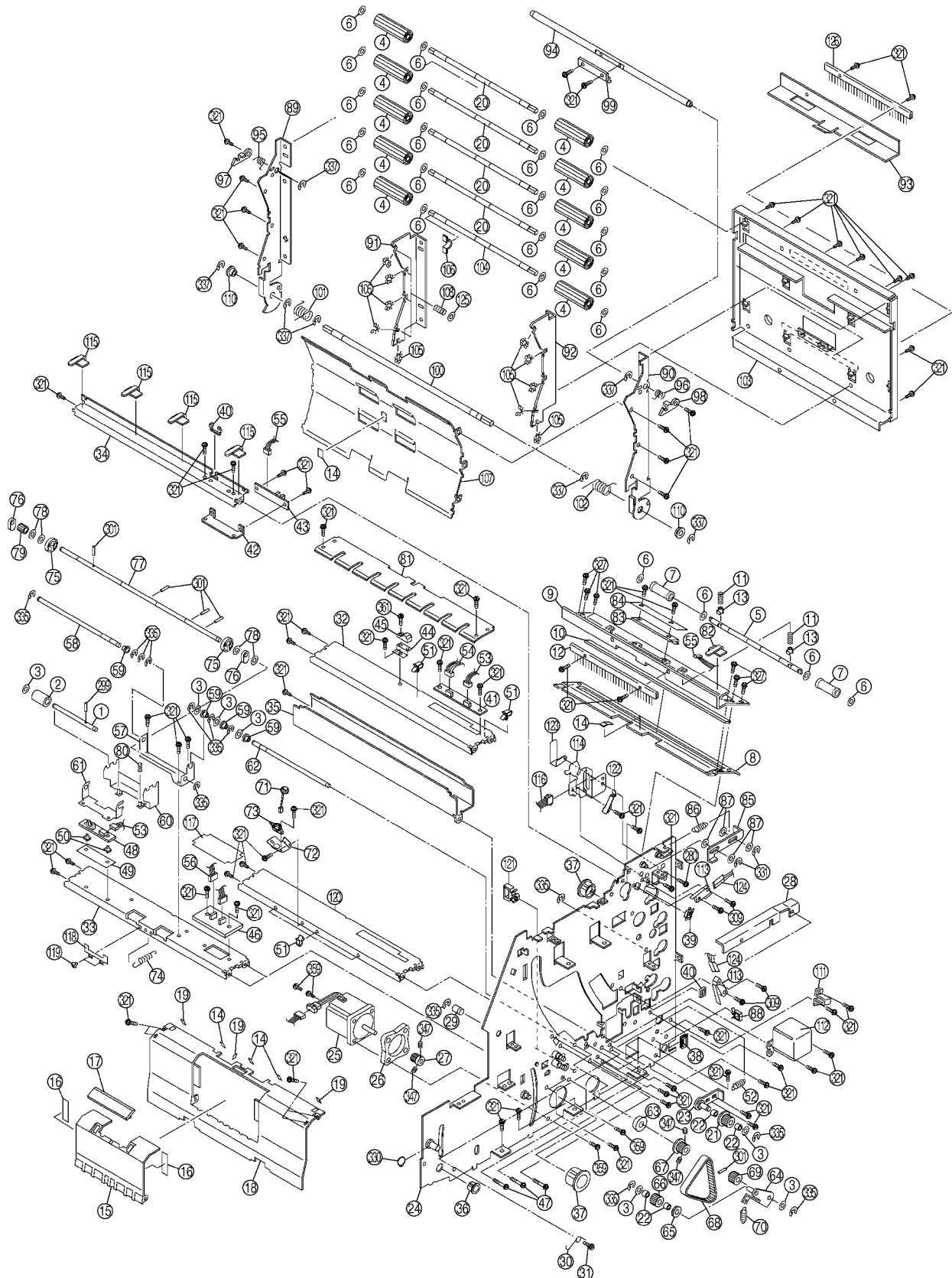


REPLACEMENT MECHANICAL PARTS LIST (Chassis and Base 1)

Ref. No.	Part No.	Part Name & Description	Remarks
1	A4JZC28C0003	Lamp	
2	PJMCC0048Z	Lamp Holder Up-A	
3	PJMCC0019Z	Dust Protect Sheet 3	ISO: SI
4	PJZR08074M	Drive Roller F Assembly	
5	PJDFB0038Y	Conveyor Bottom 3 Shaft	
6	PJUEB0005Z	Conveyor Up White	
7	PJUEB0007Z	Conveyor Bottom Black	
8	PJUEC0150Z	Conveyor Bottom 4	
9	PJMDC0039Z	Glass Plate	
10	PJHEC0093Z	Target Glass	
11	PJHEC0076Z	Dust Cover Sheet 2	ISO: SI
12	PJHEC0075Z	Dust Cover Sheet 1	ISO: SI
13	PBULX0098Y	Tension Plate	
14	DR-19-H6	DS-Bearing	
15	RWPS6-100	Spacer	
16	RWPS6-025	Spacer	
17	PBDGA0048Z	Tension Pulley	
18	B-S6-168	Bearing	
19	PJULB0017Y	Tension Plate 4-A	
20	PBDGA0036Z	Pulley Gear	ISO: POM
21	23KM-K711-05	Feed Motor	△
22	PBHE28Z	Damper	
23	PBDGA0049Z	Pulley	
24	PJUAB0020Y	Main Chassis L-A	
25	PJULB0009Y	Optical Unit Guide 2L	
26	PBDEA0198Z	Spacer	
27	PJDSB0050Z	Conveyor 3 Press Spring	
28	PBHDA0003Y	Screw	
29	PJUAC0199Z	Base-A	
30	C-30FRB-3220	Rubber Foot	
31	PBULA0088Y	Plate Reinforcement 2	
32	PJWP08073M	JAM Board	(RTL)
33	PBHDA0001Y	Screw	
34	PBUS8Z	Conveyor Spring	
35	YMC10-0	Clamp	
36	PBDS10Z40	Tension Spring	
37	LWS-1S	Clamper	
38	PJJRB0628Z	Conveyor Motor Cable	
39	PJJRB0643Z	Jam Sensor Cable	
40	PBDG3Z	Cam	ISO: POM
41	PJZR08070M	Exit Roller Assembly	
42	PJZR08073M	Drive Roller 1 Assembly	
43	PJZR08072M	Drive Roller 1-2 Assembly	
44	PJZR08071M	Drive Roller 2 Assembly	
45	B100S2M710	Conveyor Belt (1)	
46	B100S2M560	Conveyor Belt (2)	
47	PBUEA0072Z	Conveyor Up 5	
48	PJUEB0003Z	Conveyor Up 6	
49	PBHRA0117Z	Pointer	ISO: PC
50	PJDFB0036Z	Pointer Shaft	
51	PJMDB0062Y	Pointer Plate	
52	PJDJB0007Z	Bearing	ISO: POM
53	PJMDB0055Z	Pointer Lever	
54	PBBSA0002Z-1	Retard Cancellation Lever	ISO: ABS
55	PJUSB0029Z	Pointer Hold Spring	
56	PJDSB0049Y	Conveyor 3 Spring	
57	PBDJA0014Z	Spacer	
58	PJMDC0036Z	Imprinter Support Plate L	
59	PJUSB0099Z	Imprinter Lock Spring	
60	PJHEC0094Z	Glass Sheet	ISO: SI
61	LWS-3S	Clamper	
62	PJMDB0046Y	Gas Spring Stay 1	
63	C-54-2	Magnet	
65	PBMDA0553Z	Plate	
68	PJULC0031Z	Side Panel Stay 2	
70	ASU-350	Spacer	
71	N0ZZ00000015	Lamp Inverter Board	△
72	PJMDB0049Z	LAMP Board Stay	
73	K-103G-R	Clamper	
74	EDS-3	Edge saddle	
75	LWS1SV0BK	Locking Wire Saddle	
76	PJULB0002X	Side Panel Stay 1	

Ref. No.	Part No.	Part Name & Description	Remarks
77	PJJRC2598Z	Lamp Driver Cable	
78	PJJRB0627Z	Lamp (F) Connect Cable	
79	PJJRB0626Z	Lamp (B) Connect Cable	
80	PBMDA0288Y	Front Panel plate	
81	PJHEB0038Z	Pointer Cover Sheet	ISO: PC
82	PJHEB0041Z	Platen Sheet	ISO: PC
83	PJMDB0184Y	Lamp Barrier Plate	
84	PJHEB0025Z	Lamp Reflector	ISO: PC
85	PJMCC0041Z	Lamp Cover L Up	
86	PJHEB0026Z	Lamp Spacer Up	
87	EDS-0607M	Edge Saddle	
88	PJMCC0050Z	Lamp Holder Bottom-A	
89	PJMCC0042Z	Lamp Cover L Bottom	
90	CS-2-R	Clip	
303	XPJ2C12VW	Pin	
306	XSN3+4FJ	Screw	
308	XTN4+16FFJ	Screw	
313	XTW3+8SFJ	Screw	
321	XTW3+U6LFJ	Screw	
327	XTW3+U8LFJ	Screw	
335	XUC5FJ	E-ring	
337	XUC6FJ	E-ring	
347	XXE3W2.5FT	Hex-head Screw	
359	XYN4+J10FJ	Screw	

14.3. Chassis and Base 2

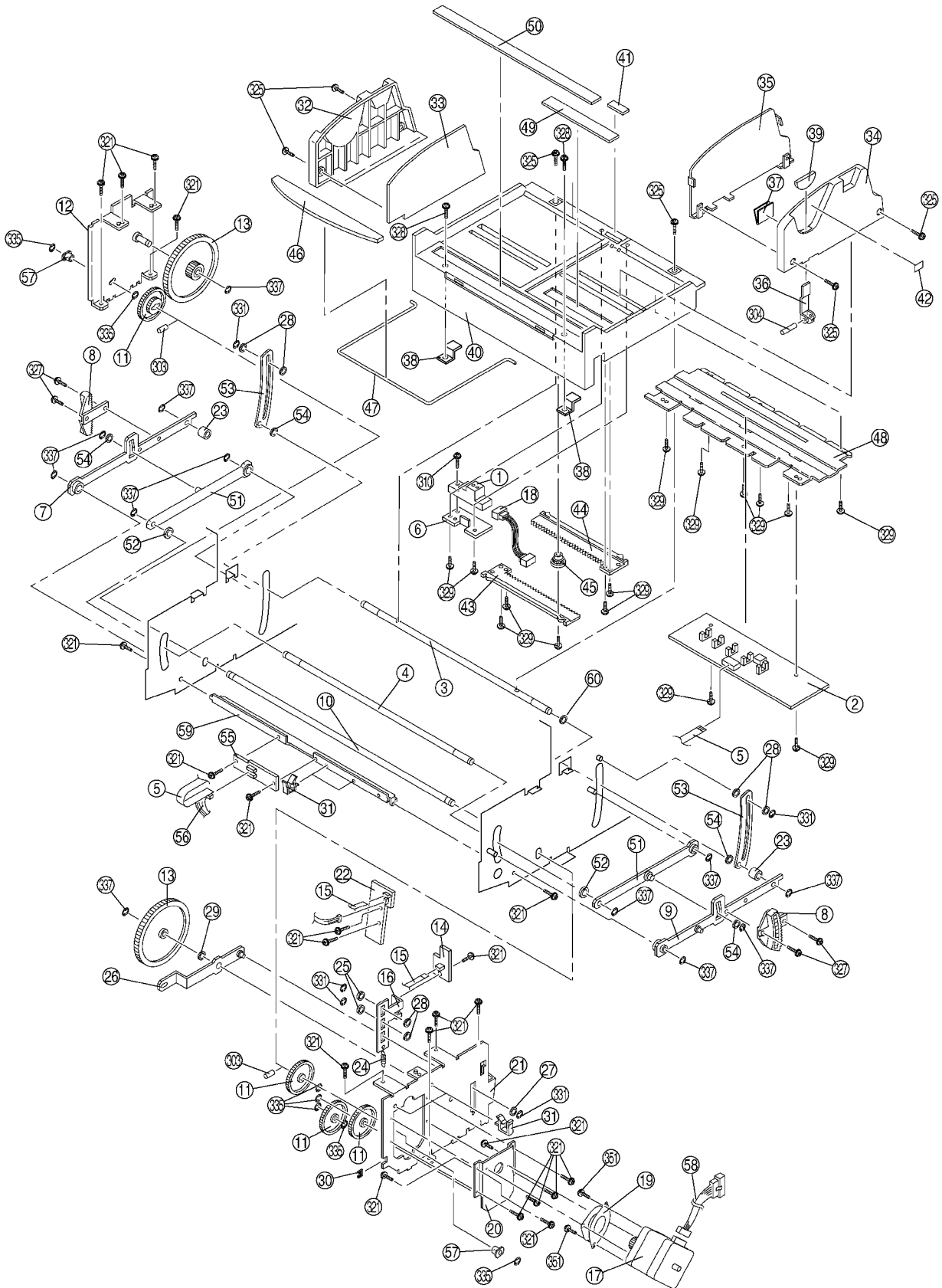


REPLACEMENT MECHANICAL PARTS LIST (Chassis and Base 2)

Ref. No.	Part No.	Part Name & Description	Remarks
1	PJDFB0029Z	Retard Shaft	
2	PJDR00084Z	Retard Roller	
3	RWPS6-025	Spacer	
4	PJDRB0027Z-J	Roller assemble	
5	PJDFC0176Z	Exit Free Roller Shaft	
6	PJNW4111Z	Spacer	ISO: PA
7	PJZR08075M	Exit Free Roller	
8	PJUEC0155Z	Conveyor Up 7-A	
9	PJUEC0153Z	Exit Conveyor A	
10	PBHRX0150Z	Ink Absolution Felt	
11	PBDSA0081Z	Spring	
12	PBMEA0057Z	Discharge Brush	
13	PJDA0016Z	Roller Bear	ISO: POM
14	PJHEB0023Z	Reflect Sensor Sheet 2	ISO: PC
15	PJHRB0090Z	Retard Cover	ISO: ABS
16	PJHEB0011Z	Retard Cover Magnet	
17	PJHRB0091Z-J	Pad Flame Assemble	ISO: ABS/SUS
18	PJUEC0157Z	Conveyor Bottom 1-A	
19	PJHEB0022Z	Reflect Sensor Sheet 1	ISO: PC
20	PBDFA0066Z	Free Roller Shaft	
21	PBDGA0036Z	Pulley Gear	ISO: POM
22	B-S6-168	Bearing	
23	PJULB0014Y	Tension Plate 3-A	
24	PJUAB0018Y	Main Chassis R-A	
25	23KM-K711-05	Feed Motor	△
26	PBHE28Z	Damper	
27	PBDGA0051Z	Pulley	
28	PJULB0008Y	Optical Unit Guide 2R	
29	PBDEA0198Z	Spacer	
30	PJDSB0050Z	Conveyor 3 Press Spring	
31	PBHDA0003Y	Screw	
32	PJULB0006Y	Support 1-1	
33	PJULB0007Y	Support 1-2	
34	PBULA0089Y	Plate Reinforcement (3)	
35	PJMCC0045Z	Dust Cover Bottom-A	
36	TB-1116	Bush	
37	TB-2533	Bush	
38	EDS-17L	Lock Edge Saddle	
39	EDS-3	Edge saddle	
40	EDS-0607U	Edge Saddle	
41	PJWP08072M	POINTER Board	(RTL)
42	PBMDA0297Y	Sensor Plate	
43	PJWP08074M	POST IMPRINTER DOOR Board	(RTL)
44	PJULB0005Y	Sensor Plate	
45	B3NZB0000006	Photo Coupler (Paper Sensor)	
46	PJWP08075M	RELAY [LOWER] Board	(RTL)
47	PBHDA0001Y	Screw	
48	PJWP08077M	RETARD [POSITION] Board	(RTL)
49	PJHEB0036Z	Retard Sensor Sheet	ISO: PC
50	WLS-03-0	Spacer	
51	YMC10-0	Clamp	
52	PJDSB0153Z	Tension Spring 2	
53	PJJRB0633Z	Hopper Cable	
54	PJJRB0634Z	Exit (R) Sensor Cable	
55	PJJRB0636Z	Numbering Door Cable	
56	PJJRC2588Z	Double Feed (G) Cable	
57	PJMDB0056Y	Retard Support	
58	PJDFB0033Z	Retard Support Shaft	
59	B-F6-69	Metal	
60	PJMDB0071Y	Retard Plate	
61	PJMDC0035Z	Retard Press Plate	
62	PJDFB0032Z	Retard Drive Shaft	
63	DDL-F-1360ZZR	Bearing	
64	PJZH08070M	Planet Plate Sub Assembly	
65	PBDRA0031Z	Pitch Roller 2	ISO: POM
66	PBDGA0037Z	Idler Gear	ISO: POM
67	PBDGA0050Z	Drive Pulley	
68	B60S2M236	Belt	
69	PBDGA0038Z	Retard Gear	ISO: POM
70	PJDSB0158Z	Spring	
71	L2FA00000005	SENSOR Unit (Double Feed Detector)	
72	PJMDC0032Z	Sensor Plate 1	

Ref. No.	Part No.	Part Name & Description	Remarks
73	PJHRB0673Z	Double Feed Spacer	ISO: ABS
74	PJDSB0048Z	Counter Spring	
75	PBDGA0015Z	Hopper Cam	ISO: POM
76	PBDGA0056Z	Hopper Powerful Cam	ISO: POM
77	PJDFB0035Z	Retard Adjust Shaft	
78	PJNW525Z	Spacer	ISO: PA
79	PBHRA0023Z	Hopper Cam Shutter	ISO: ABS
80	PJDSB0047Z	Retard Spring	
81	PJUEB0018Y	Conveyor Bottom 5-A	
82	K-103G-R	Clamper	
83	PJWP08078M	EXIT [FRONT] Board	(RTL)
84	PJHEC0078Z	Exit Cover Sheet	
85	PBULA0108Y	Door Switch Link	
86	PBDSA0077Z	Door Switch Spring	
87	PJNW419Z	Spacer	ISO: PA
88	LWS-3S	Clamper	
89	PJUAB0009Y	Cover Side Plate L	
90	PJUAB0010Y	Cover Side Plate R	
91	PJMDB0053Y	Free Roller Plate L	
92	PJMDB0054Y	Free Roller Plate R	
93	PJUEB0009Y	Straight Conveyor	
94	PBDFA0064Z	Lock Lever Shaft	
95	PBDS17Y	Lock Lever Spring L	
96	PBDS16Y	Lock Lever Spring R	
97	PBUC29Y	Lock Lever L	
98	PBUC30Y	Lock Lever R	
99	PBUL30Y	Lock Release Plate	
100	PBDFA0067Z	Cover Shaft	
101	PBDSA0072Y	Cover Spring L	
102	PBDSA0073Y	Cover Spring R	
103	PJUAB0011Y	Cover Rear Plate	
104	PJDFB0034Z	Rear Free Roller Shaft	
105	PBDSA0071Z	Free Roller Support Spring	
106	PBHRA0181Z	Spacer	ISO: POM
107	PJUEB0001Z	Outer Conveyor	
108	PBDSA0074Z	Free Roller Spring	
110	PBFV4Z	Bushing	ISO: POM
111	PJMDB0046Y	Gas Spring Stay 1	
112	PJMCB0011Z	Lamp Cover R Bottom	
113	K0KACF000073	Micro Switch	△
114	PJMDC0037Z	Imprinter Support Plate R	
115	K-105G-R	Clamp	
116	PJJRC2599Z	Imprinter Control Cable	
117	PJHEB0015Z	RELAY Board Sheet	ISO: PC
118	PJHEB0024Z	Retard Spring Sheet	ISO: PC
119	VJF0036	Rivet	
120	PJULC0034Z	Support 1-3	
121	LWS-1S	Clamper	
122	PJUSB0100Z	Imprinter Lock Spring	
123	PJMDC0038Z	Imprinter Connector Plate	
124	PJJRC2600Z	Door Switch Cable	
125	RWPS5-025	Spacer	
126	PBMEA0010Z	Discharge Brush	
280	RTP3+8(3)BC	Screw	
299	XPL2B12WVW	Pin	
301	XPJ2C10VW	Pin	
309	XTW3+U14LFJ	Screw	
321	XTW3+U6LFJ	Screw	
327	XTW3+U8LFJ	Screw	
330	XUB14FZ	C-ring	
331	XUC3FJ	E-ring	
335	XUC5FJ	E-ring	
337	XUC6FJ	E-ring	
347	XXE3W2.5FT	Hex-head Screw	
359	XYN4+J10FJ	Screw	
361	XTB3+6FFJ	Screw	

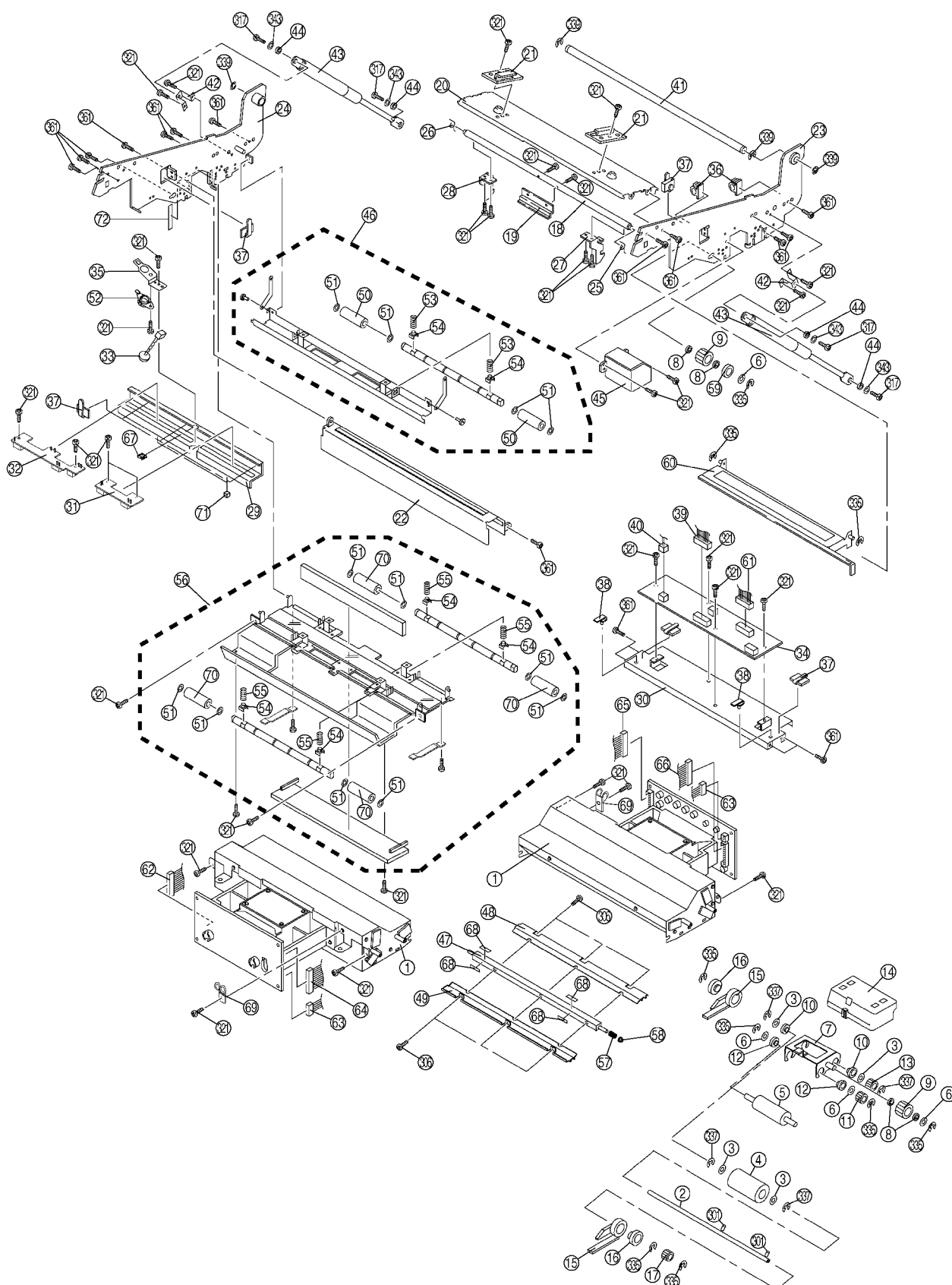
14.4. Hopper Unit



REPLACEMENT MECHANICAL PART LIST (Hopper Unit)

Ref. No.	Part No.	Part Name & Description	Remarks
1	B3NZB0000006	Photo Coupler (Paper Sensor)	
2	PJWP0807BM	SIZE Board	(RTL)
3	PJDFB0028Y	Hopper Shaft 1	
4	PBDFA0069Z	Hopper Shaft 2	
5	PJJEC3442Z	Size Cable	
6	PBMDA0573Y	Plate	
7	PJULB0011Y	Hopper Arm 1L-A	
8	PBDGA0046Z	Hopper Rack	ISO: POM
9	PJULB0013Y	Hopper Arm 1R-A	
10	PBDFA0070Z	Hopper Drive Shaft	
11	PBDGA0043Z	Hopper Gear (2)	ISO: POM
12	PBUAX0102Y	Hopper Chassis-L	
13	PBDGA0042Z	Hopper Gear	ISO: POM
14	PJWP08079M	HOPPER ANGLE Board	(RTL)
15	PJJEC3443Z	Hopper Angle Cable	
16	PBULA0113Y	Sensor Plate	
17	17PMK103-G8V	Scanner Motor	△
18	PJJRB0631Z	Paper Detect Sensor Cable	
19	RF1401-A5	Motor Mount	
20	PJMDB0068Y	Motor Chassis A	
21	PJUAB0012Y	Hopper Sub Chassis R-A	
22	PJWP0807AM	HOPPER POSITION Board	(RTL)
23	PBHRA0134Z	Spacer	
24	PBDSA0075Z	Spring	
25	PBHRA0136Z	Spacer	ISO: POM
26	PBULX0112Y	Hopper Link Sensor	
27	PJNW413Y	Spacer	
28	PJNW419Z	Spacer	ISO: PA
29	RWPS10-050	Spacer	
30	EDS-0607U	Edge Saddle	
31	YMC10-0	Clamper	
32	PBHRA0122Y	Paper Guide L	ISO: ABS
33	PBULA0115Z	Paper Guide Plate L	
34	PBHRA0123Y	Paper Guide R	ISO: ABS
35	PBULA0116Z	Paper Guide Plate R	
36	PBMDA0427Y	Paper Guide Stopper	
37	PBUSA0031Z	Stopper Spring	
38	PJMDB0185Z	Hopper Stay	
39	PBHRA0154Y	Stopper Cover	ISO: ABS
40	PBHAA0033X	Hopper Plate	ISO: ABS
41	PBHEA0049Z	Hopper Pad	
42	PBQAA0678Y	Label	
43	PBDGA0044Z	Document Guide Rack (L)	ISO: POM
44	PBDGA0045Z	Document Guide Rack (R)	ISO: POM
45	PJDG50133Z	Pinion	ISO: POM
46	PBHRA0125Y	Extension Tray	ISO: ABS
47	PBULA0114Z	Extension Guide	
48	PJMDB0051Y	Lack Cover	
49	PBHEA0064Y	Stopper Pad	
50	PJQTB0046Z	Size Label	
51	PBULX0111Y	Hopper Arm 2	
52	PBHRA0135Z	Arm Spacer	ISO: POM
53	PBMDA0420Y	Slit Cover	
54	PJNW822Z	Spacer	
55	PJWP08076M	HOPPER CONNECTOR Board	(RTL)
56	PJJRB0632Z	Hopper Connect Cable	
57	PBFU3Z	Bearing	
58	PJJRB0629Z	Hopper Motor Cable	
59	PBULA0088Y	Plate Reinforcement 2	
60	PJNWB0517Z	Cut Spacer	
303	XPJ2C12VW	Pin	
304	XPJ3C30VW	Pin	
310	XTB3+6FFJ	Screw	
321	XTW3+U6LFJ	Screw	
325	XTW3+U6LFJK	Screw	
327	XTW3+U8LFJ	Screw	
328	XTW3+U8LFJK	Screw	
329	XTW3+U8PFJ	Screw	
351	XYN3+J6FJ	Screw	
331	XUC3FJ	E-ring	
335	XUC5FJ	E-ring	
337	XUC6FJ	E-ring	

14.5. Paper Feed and Optical Units

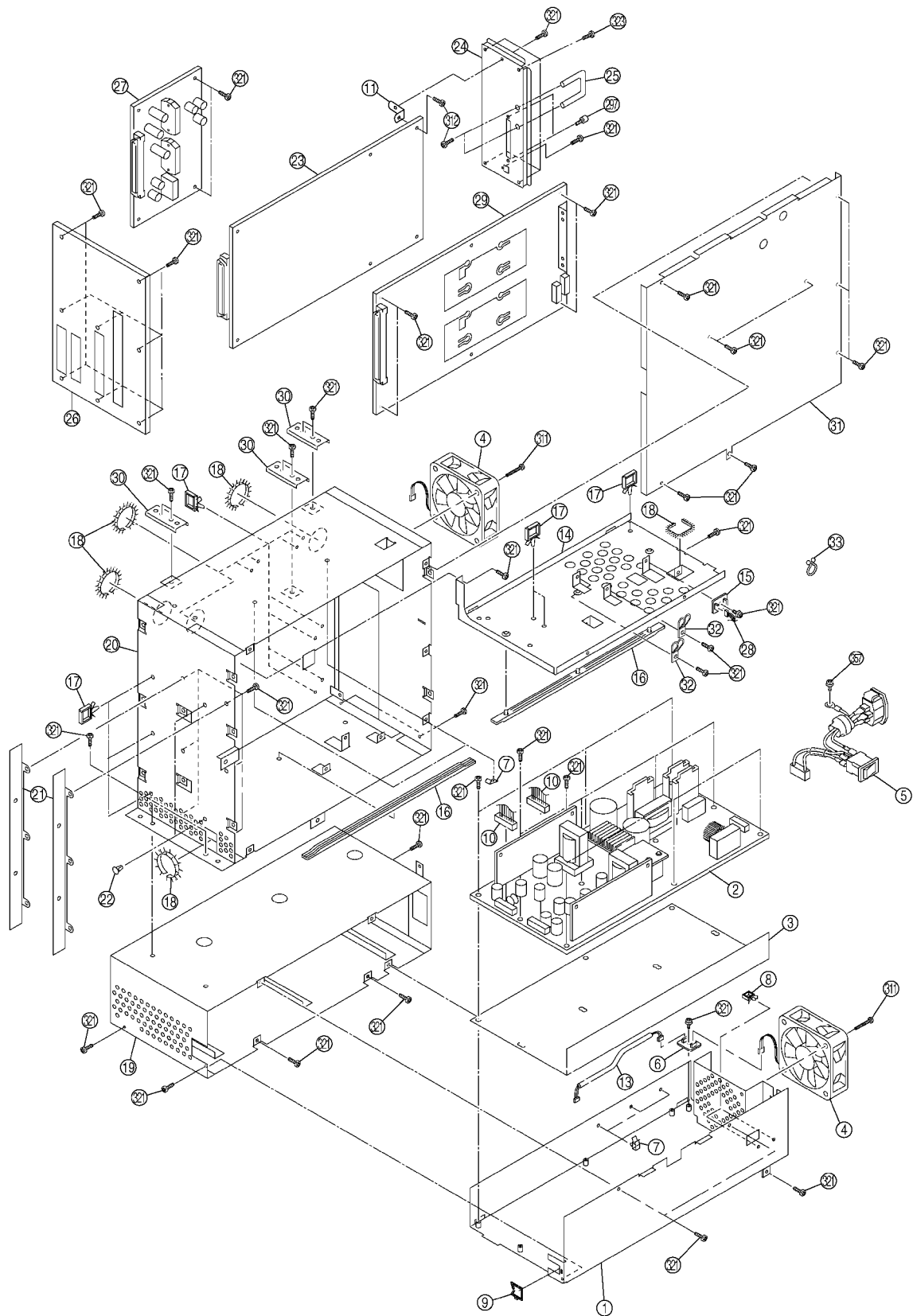


REPLACEMENT MECHANICAL PARTS LIST (Paper Feed and Optical Unit)

Ref. No.	Part No.	Part Name & Description	Remarks
1	PJZY08070M	Optical Unit	
2	PJDFB0030Z	Separation Roller Shaft	
3	RWPS8-025	Polyslider	
4	PJDRC0083Z	Separation Roller	
5	PJDRC0082Z	Feed Roller	
6	RWPS6-025	Spacer	
7	PJMDC0030Z	Paper Feed Holder-A	
8	B-S6-168	Bearing	
9	PBDGA0037Z	Idler Gear	ISO: POM
10	DDLDF-1280ZZH	Ball Bearing2	
11	PJDGC0166Z	Paper Feed Gear	
12	B-F6-69	Metal	
13	PBDGA0055Z	Separation Drive Gear	
14	PJHRB0089Z	Feed Roller Cover	ISO: ABS
15	PBHRA0119Y	Feed Roller Lever	ISO: POM
16	DDLDF-1360ZZR	Bearing	
17	PBDGA0038Z	Retard Gear	ISO: POM
18	PBDFA0054Z	Switching Shaft	
19	PBUL30Y	Lock Release Plate	
20	PJULB0010Y	Support 5	
21	PBHRA0126Z	Guide Holder	ISO: POM
22	PJMCC0043Z	Dust Cover Up-A	
23	PJUAB0014Y	Sub Chassis R-A	
24	PJUAB0016Y	Sub Chassis L-A	
25	PBDSA0064Z	Lever Spring R	
26	PBDSA0065Z	Lever Spring L	
27	PBHMA0107Z	Lever R	
28	PBHMA0108Z	Lever L	
29	PJMDB0052Y	Skew Sensor Stay	
30	PJULB0004Y	Support 4	
31	PJWP0807EM	Skew [L] Board	(RTL)
32	PJWP0807DM	Skew [R] Board	(RTL)
33	L2FA00000005	SENSOR Unit (Double Feed Detector)	
34	PJWP0807CM	RELAY [UPPER] Board	(RTL)
35	PJMDC0033Z	Sensor Plate 2	
36	CKN-10	Clamper	
37	K-103G-R	Clamper	
38	YMC10-0	Clamper	
39	PJJRB0642Z	STBY Sensor Cable	
40	PJJRC2589Z	Double Feed Receive Cable	
41	PJDFB0048Z	Sub Chassis Shaft	
42	PJMDB0047Y	Gas Spring Stay 2	
43	Y0005	Gas Damper	
44	PBHMA0106Y	Spacer	
45	PJMCC0040Z	Lamp Cover R Up	
46	PJUEX07S905C	Conveyor Up 4 Arm Assembly	
47	PJDFB0037Y	Conveyor Up 3 Shaft	
48	PJUEB0005Z	Conveyor Up White	
49	PJUEB0006Z	Conveyor Up 3B	
50	PJDRB0027Z-J	Roller assemble	
51	PJNW4111Z	Spacer	ISO: PA
52	PJHRB0673Z	Double Feed Spacer	ISO: ABS
53	PBDSA0066Z	Feed Roller Spring	
54	PJDJA0016Z	Pressure Roller Bear	ISO: POM
55	PJDSB0117Z	Free Roller Spring	
56	PJZB08070M	Conveyor Up 1 Assembly	
57	PJDSB0049Y	Conveyor 3 Spring	
58	PBDJA0014Z	Spacer	
59	PBDGA0071Z	Pitch Roller	ISO: POM
60	PJMDB0066Y	Hopper Sensor Arm-A	
61	PJJRB0647Z	Double Feed Receive Connect Cable	
62	PJJRC2611Z	CCD (F) Digital Cable	
63	PJJRB0619Z	CCD (F) Power Cable	
64	PJJRB0620Z	CCD (F) Analog Cable	
65	PJJRC2612Z	CCD (B) Digital Cable	
66	PJJRB0623Z	CCD (B) Analog Cable	
67	EDS-0607M	Edge Saddle	
68	PJHEB0041Z	Platen Sheet	
69	AL5	Clamper	
70	PJDRB0072Y	FR Free Roller	
71	PJHEB0044Z	Free Roller Hold Sheet	
72	PJHEB0047Z	Dust Cover Sheet 4	

Ref. No.	Part No.	Part Name & Description	Remarks
301	XPJ2C10VW	Pin	
306	XSN3+4FJ	Screw	
317	XTB4+10FFJ	Screw	
321	XTW3+U6LFJ	Screw	
335	XUC5FJ	E-ring	
337	XUC6FJ	E-ring	
339	XUC8FJ	E-ring	
343	XWG6FJ	Washer	
361	XTB3+6FFJ	Screw	

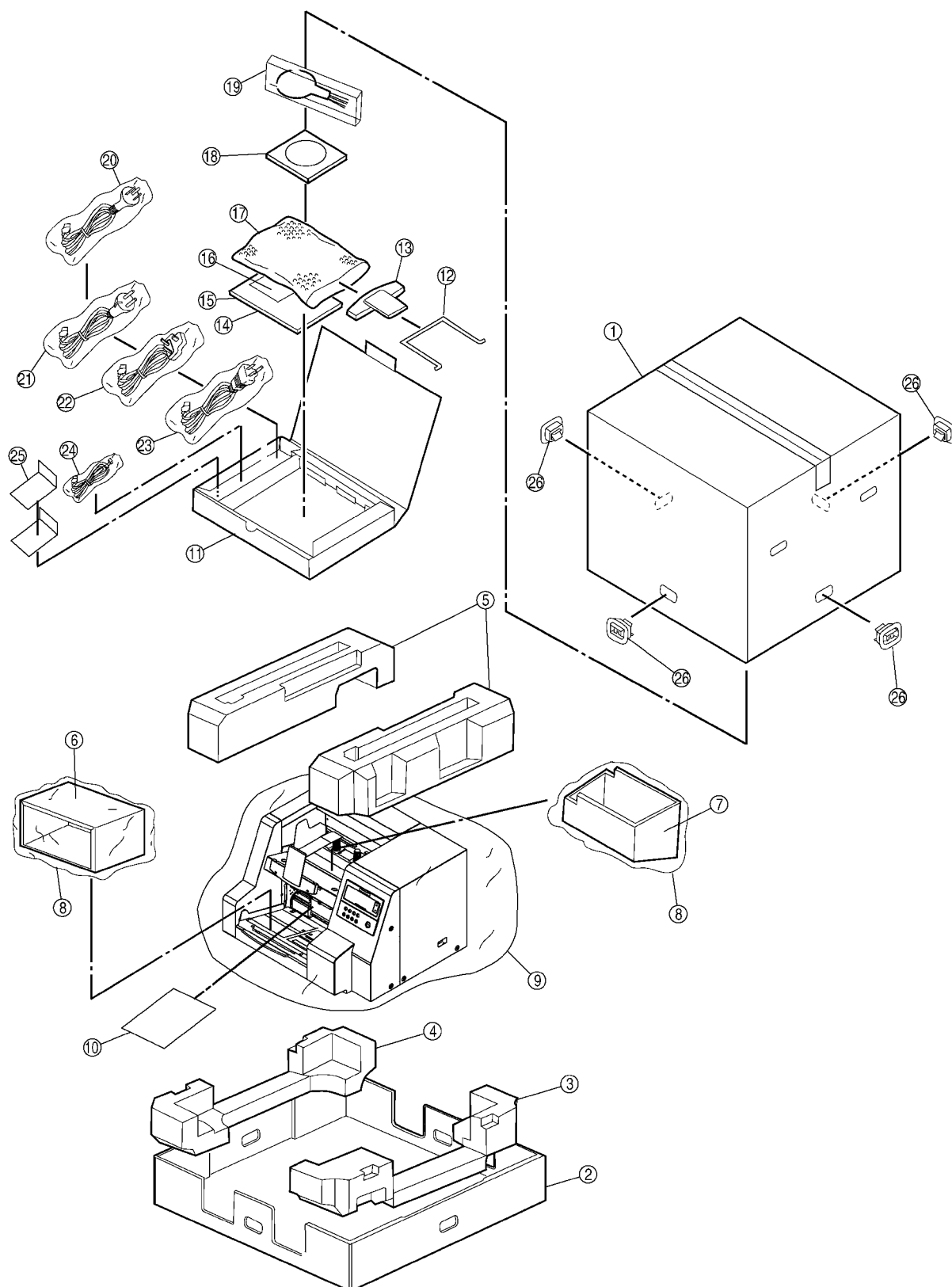
14.6. Power Unit and Circuit Boards



REPLACEMENT MECHANICAL PARTS LIST (Power Unit and Circuit Boards)

Ref. No.	Part No.	Part Name & Description	Remarks
1	PJMCB0031X	POWER Board Plate-A	
2	N0AE5GK00001	POWER Board	△
3	PJHEB0002Z	Power Sheet	ISO: PPE △
4	L6FALEGK0006	Fan	
5	PJJRC2590Z	Inlet Cable	△
6	PJWP0807FM	FAN RELAY 1 Board	(RTL)
7	YMC10-0	Clamper	
8	LWS1SV0BK	Locking Wire Saddle	
9	NF-0405-V0	Wire Clip	
10	PJJRC2613Z	Main Power Cable	
11	PJULC0039Z	IF Connect Plate	
13	PJJRB0661Z	FAN Relay Cable 1	
14	PJMCB0014Y	Board Box Plate	
15	PJWP0807GM	FAN RELAY 2 Board	(RTL)
16	GR-280S	Rail	
17	LWS-3S	Clamper	
18	KG-010-L90	Bush-L090	
19	PJMCB0013Y	Power Box	
20	PJMCB0034Y	Board Box-A	
21	PJMDB0010Y	DRIVE Board Fitting Plate	
22	KGPS-6RF	Spacer	
23	PJWP0807HM	INTERFACE Board for KV-S3105C Series	(RTL)
23	PJWP08130M	INTERFACE Board for KV-S3085 Series	(RTL)
24	PJMCC0047Z	I/F Board Stay	
25	A-46-5	Handle	
26	PJWP0807IM	MOTHER Board	(RTL)
27	PJWP0807JM	DRIVE Board	(RTL)
28	PJJRB0658Z	FAN Relay Cable 2	
29	PJWP0807KM	CONTROL Board	(RTL)
30	PBMDA0305Y	Join Plate	
31	PJMCB0017Y	Board Box Cover	
32	AL5	Clamper	
33	TMM6463	Clamper	
297	PCSXE50SJ6U2	Screw	
311	XTW3+U30LFJ	Screw	
312	XSB26+4FJ	Screw	
321	XTW3+U6LFJ	Screw	
357	XYN4+F8FJ	Screw	

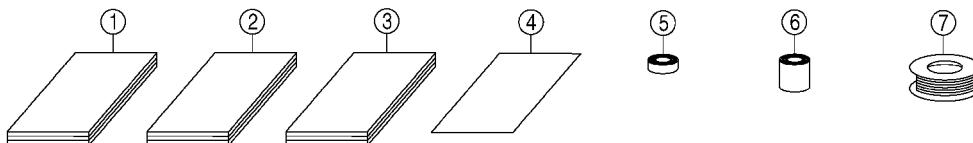
14.7. Packing



REPLACEMENT MECHANICAL PARTS LIST (Packing)

Ref. No.	Part No.	Part Name & Description	Remarks
1	PJPGC0215Z	Outer Carton for KV-S3105C	
1	PJYC08070CN	Outer Carton for KV-S3105CCN	
1	PJPGC0321Z	Outer Carton for KV-S3085	
2	PJPGB0029Z	Bottom Carton	
3	PJPQC0023Z	Cushion of Bottom R	ISO: PP
4	PJPQC0024Z	Cushion of Bottom L	ISO: PP
5	PJPQC0022Z	Cushion of Upper	ISO: PP
6	PBPNA0151Y	Fix Carton	
7	PJPNB0038Z	Guide Pad	
8	ZVC0XJ711MU0	Cover for Fix Carton	ISO: PE
9	PJPPB0003Z	Protection Bag	ISO: PE
10	PJQXC0046Z	Roller Protect Sheet	
11	PJPNB0063Z	Attached Parts Box	
12	PJULC0030Z	Stacker Extension Guide	
13	PBHRA0127Y	Exit Tray	ISO: ABS
14	PJQHC0088Z	Maintenance Manual for English	
14	PJQHC0089Z	Maintenance Manual for German	
14	PJQHC0090Z	Maintenance Manual for Chinese	
15	PJQXC0043Z	Installation Manual for English	
15	PJQXC0044Z	Installation Manual for German	
15	PJQXC0045Z	Installation Manual for Chinese	
16	PBHSA0055Z	Roller Cleaning Paper	
17	PBPE6Z	Cushion Bag for Exit Tray	ISO: PE
18	PBAQA0212N	CD-ROM	
19	PJIUA0001Z	Blower Brush	
20	K2CK3DH00033	Power Cord (240V) for Chinese Type	⚠
21	K2CM3DH00012	Power Cord (240V) for German Type	⚠
22	K2CT3DH00024	Power Cord (240V) for UK Type	⚠
23	K2CG3DH00032	Power Cord (120V) for USA Type	⚠
24	K1HB04CD0003	USB Cable	
25	PBMDA0426Z-J	Exit Tray Guide	
26	HP-601W2-R	Joint	ISO: PP

14.8. Tool



REPLACEMENT MECHANICAL PARTS LIST (Tool)

Ref. No.	Part No.	Part Name & Description	Remarks
1	PBQX90095Z-J	Test Chart A(A4) (10 Pieces)	
2	PJQXC0034Z-J	Shading Paper (10 Pieces)	
3	PBQX90104Z-J	Test Chart A (10 Pieces)	
4	PBQX90105Z-J	Test Chart B (10 Pieces)	
5	T4E30725-2	Polyester Tape (19mm)	
6	T4E307100	Polyester Tape (100mm)	
7	RMA02M705-08	Eco Solder	

15 REPLACEMENT PARTS LIST

IMPORTANT SAFETY NOTICE

Components identified by  mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

Note: RTL (Retention time limited)

The marking (RTL) in the Remark column indicates that Retention Time is limited for this item. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.

Abbreviation of Part Name and Description

1. Resistor

Example:

ERJ6GEYJ472 4.7k / J / 0.1W (1/10W)

ALLOWANCE	
F	±1%
G	±2%
J	±5%
K	±10%
M	±20%

2. Capacitor

Example:

ECUX1H104ZFX 0.1 / Z / 50V

ALLOWANCE	
C	±0.25 pF
D	±0.5 pF
F	±1 pF
J	±5%
K	±10%
L	±15%
M	±20%
P	+100% -0%
Z	+800% -20%

15.1. CONTROL Board

Ref. No.	Part No.	Part Name & Description	Remarks
RESISTORS			
R1001	ERJ3GEYJ472	4.7K / J / (1/10W)	
R1003	ERJ3GEY0R00	0-ohm Jumper	
R1004	ERJ3EKF3001	30K / F / (1/16W)	
R1005	ERJ3EKF3600	3.6K / F / (1/16W)	
R1006	ERJ3EKF1001V	1.0K / F / (1/16W)	
R1007	ERJ3EKF1001V	1.0K / F / (1/16W)	
R1008	ERJ3GEY0R00	0-ohm Jumper	
R1009	ERJ3GEY0R00	0-ohm Jumper	
R1010	ERJ3GEY0R00	0-ohm Jumper	
R1011	ERJ3GEY0R00	0-ohm Jumper	
R1012	ERJ3GEY0R00	0-ohm Jumper	
R1013	ERJ3GEY0R00	0-ohm Jumper	
R1014	ERJ3GEYJ470	47 / J / (1/10W)	
R1015	ERJ3GEYJ470	47 / J / (1/10W)	
R1016	ERJ3GEYJ470	47 / J / (1/10W)	
R1017	ERJ3GEYJ470	47 / J / (1/10W)	
R1018	ERJ3GEY0R00	0-ohm Jumper	
R1019	ERJ3GEY0R00	0-ohm Jumper	
R1020	ERJ3GEY0R00	0-ohm Jumper	
R1021	ERJ3GEY0R00	0-ohm Jumper	
R1022	ERJ3GEYJ100	10 / J / (1/10W)	
R1023	ERJ3GEYJ100	10 / J / (1/10W)	
R1026	ERJ3GEY0R00	0-ohm Jumper	
R1027	ERJ3GEY0R00	0-ohm Jumper	
R1030	ERJ3GEYJ100	10 / J / (1/10W)	
R1031	ERJ3GEYJ100	10 / J / (1/10W)	
R1032	ERJ3GEYJ470	47 / J / (1/10W)	
R1033	ERJ3GEYJ470	47 / J / (1/10W)	
R1034	ERJ3GEYJ470	47 / J / (1/10W)	
R1035	ERJ3GEYJ470	47 / J / (1/10W)	
R1036	ERJ3GEYJ470	47 / J / (1/10W)	
R1037	ERJ3GEYJ470	47 / J / (1/10W)	
R1040	ERJ3GEYJ471	470 / J / (1/10W)	
R1041	ERJ3GEYJ471	470 / J / (1/10W)	
R1046	ERJ3GEYJ101	100 / J / (1/10W)	
R1047	ERJ3GEYJ101	100 / J / (1/10W)	
R1048	ERJ3GEYJ471	470 / J / (1/10W)	
R1049	ERJ3GEYJ471	470 / J / (1/10W)	
R1050	ERJ3GEY0R00	0-ohm Jumper	
R1051	ERJ3GEY0R00	0-ohm Jumper	
R1052	ERJ3GEY0R00	0-ohm Jumper	
R1053	ERJ3GEY0R00	0-ohm Jumper	
R1054	ERJ3GEYJ470	47 / J / (1/10W)	
R1055	ERJ3GEYJ470	47 / J / (1/10W)	
R1056	ERJ3GEYJ470	47 / J / (1/10W)	
R1057	ERJ3GEYJ470	47 / J / (1/10W)	
R1058	ERJ3GEY0R00	0-ohm Jumper	
R1059	ERJ3GEY0R00	0-ohm Jumper	
R1060	ERJ3GEY0R00	0-ohm Jumper	
R1061	ERJ3GEY0R00	0-ohm Jumper	
R1062	ERJ3GEYJ100	10 / J / (1/10W)	
R1063	ERJ3GEYJ100	10 / J / (1/10W)	
R1066	ERJ3GEY0R00	0-ohm Jumper	
R1067	ERJ3GEY0R00	0-ohm Jumper	
R1070	ERJ3GEYJ100	10 / J / (1/10W)	
R1071	ERJ3GEYJ100	10 / J / (1/10W)	
R1072	ERJ3GEYJ470	47 / J / (1/10W)	
R1073	ERJ3GEYJ470	47 / J / (1/10W)	
R1074	ERJ3GEYJ470	47 / J / (1/10W)	
R1075	ERJ3GEYJ470	47 / J / (1/10W)	
R1076	ERJ3GEYJ470	47 / J / (1/10W)	
R1077	ERJ3GEYJ470	47 / J / (1/10W)	
R1080	ERJ3GEYJ471	470 / J / (1/10W)	
R1081	ERJ3GEYJ471	470 / J / (1/10W)	
R1086	ERJ3GEYJ101	100 / J / (1/10W)	
R1087	ERJ3GEYJ101	100 / J / (1/10W)	
R1088	ERJ3GEYJ471	470 / J / (1/10W)	
R1089	ERJ3GEYJ471	470 / J / (1/10W)	
R1091	ERJ3GEY0R00	0-ohm Jumper	
R1092	ERJ3EKF3001	30K / F / (1/16W)	

Ref. No.	Part No.	Part Name & Description	Remarks
R1093	ERJ3EKF3600	3.6K / F / (1/16W)	
R1094	ERJ3EKF1001V	1.0K / F / (1/16W)	
R1095	ERJ3EKF1001V	1.0K / F / (1/16W)	
R1096	ERJ3GEY0R00	0-ohm Jumper	
R1097	ERJ3GEY0R00	0-ohm Jumper	
R1098	ERJ3GEY0R00	0-ohm Jumper	
R1099	ERJ3GEY0R00	0-ohm Jumper	
R1100	ERJ3GEY0R00	0-ohm Jumper	
R1101	ERJ3GEY0R00	0-ohm Jumper	
R1102	ERJ3GEYJ470	47 / J / (1/10W)	
R1103	ERJ3GEYJ470	47 / J / (1/10W)	
R1104	ERJ3GEYJ470	47 / J / (1/10W)	
R1105	ERJ3GEYJ470	47 / J / (1/10W)	
R1106	ERJ3GEY0R00	0-ohm Jumper	
R1107	ERJ3GEY0R00	0-ohm Jumper	
R1108	ERJ3GEY0R00	0-ohm Jumper	
R1109	ERJ3GEY0R00	0-ohm Jumper	
R1110	ERJ3GEYJ100	10 / J / (1/10W)	
R1111	ERJ3GEYJ100	10 / J / (1/10W)	
R1114	ERJ3GEY0R00	0-ohm Jumper	
R1115	ERJ3GEY0R00	0-ohm Jumper	
R1118	ERJ3GEYJ100	10 / J / (1/10W)	
R1119	ERJ3GEYJ100	10 / J / (1/10W)	
R1120	ERJ3GEYJ470	47 / J / (1/10W)	
R1121	ERJ3GEYJ470	47 / J / (1/10W)	
R1122	ERJ3GEYJ470	47 / J / (1/10W)	
R1123	ERJ3GEYJ470	47 / J / (1/10W)	
R1124	ERJ3GEYJ470	47 / J / (1/10W)	
R1125	ERJ3GEYJ470	47 / J / (1/10W)	
R1128	ERJ3GEYJ471	470 / J / (1/10W)	
R1129	ERJ3GEYJ471	470 / J / (1/10W)	
R1134	ERJ3GEYJ101	100 / J / (1/10W)	
R1135	ERJ3GEYJ101	100 / J / (1/10W)	
R1136	ERJ3GEYJ471	470 / J / (1/10W)	
R1137	ERJ3GEYJ471	470 / J / (1/10W)	
R1138	ERJ3GEYJ103	10K / J / (1/10W)	
R1139	ERJ3GEYJ220	22 / J / (1/10W)	
R1140	ERJ3GEYJ470	47 / J / (1/10W)	
R1141	ERJ3GEYJ102	1K / J / (1/10W)	
R1142	ERJ3GEYJ220	22 / J / (1/10W)	
R1146	ERJ3GEYJ220	22 / J / (1/10W)	
R1147	ERJ3GEYJ101	100 / J / (1/10W)	
R1148	ERJ3GEYJ101	100 / J / (1/10W)	
R1149	ERJ3GEYJ470	47 / J / (1/10W)	
R1150	ERJ3GEYJ470	47 / J / (1/10W)	
R1151	ERJ3GEYJ470	47 / J / (1/10W)	
R1152	ERJ3GEYJ470	47 / J / (1/10W)	
R1153	ERJ3GEYJ101	100 / J / (1/10W)	
R1154	ERJ3GEYJ220	22 / J / (1/10W)	
R1155	ERJ3GEYJ220	22 / J / (1/10W)	
R1156	ERJ3GEYJ220	22 / J / (1/10W)	
R1157	ERJ3GEYJ220	22 / J / (1/10W)	
R1158	ERJ3GEYJ122	1.2K / J / (1/10W)	
R1159	ERJ3GEYJ220	22 / J / (1/10W)	
R1160	ERJ3GEYJ220	22 / J / (1/10W)	
R1161	ERJ3GEYJ220	22 / J / (1/10W)	
R1162	ERJ3GEYJ220	22 / J / (1/10W)	
R1163	ERJ3GEYJ220	22 / J / (1/10W)	
R1164	ERJ3GEYJ220	22 / J / (1/10W)	
R1165	ERJ3GEYJ220	22 / J / (1/10W)	
R1166	ERJ3GEYJ220	22 / J / (1/10W)	
R1167	ERJ3GEYJ220	22 / J / (1/10W)	
R1168	ERJ3GEYJ220	22 / J / (1/10W)	
R1169	ERJ3GEYJ220	22 / J / (1/10W)	
R1170	ERJ3GEYJ101	100 / J / (1/10W)	
R1171	ERJ3GEYJ470	47 / J / (1/10W)	
R1172	ERJ3GEYJ220	22 / J / (1/10W)	
R1176	ERJ3GEYJ220	22 / J / (1/10W)	
R1177	ERJ3GEYJ101	100 / J / (1/10W)	
R1178	ERJ3GEYJ101	100 / J / (1/10W)	
R1179	ERJ3GEYJ470	47 / J / (1/10W)	
R1180	ERJ3GEYJ470	47 / J / (1/10W)	
R1181	ERJ3GEYJ101	100 / J / (1/10W)	

Ref. No.	Part No.	Part Name & Description	Remarks
R1182	ERJ3GEYJ220	22 / J / (1/10W)	
R1183	ERJ3GEYJ220	22 / J / (1/10W)	
R1184	ERJ3GEYJ220	22 / J / (1/10W)	
R1185	ERJ3GEYJ220	22 / J / (1/10W)	
R1186	ERJ3GEYJ122	1.2K / J / (1/10W)	
R1187	ERJ3GEYJ220	22 / J / (1/10W)	
R1188	ERJ3GEYJ220	22 / J / (1/10W)	
R1189	ERJ3GEYJ220	22 / J / (1/10W)	
R1190	ERJ3GEY0R00	0-ohm Jumper	
R1191	ERJ3GEYJ220	22 / J / (1/10W)	
R1192	ERJ3GEYJ220	22 / J / (1/10W)	
R1193	ERJ3GEYJ220	22 / J / (1/10W)	
R1194	ERJ3GEYJ220	22 / J / (1/10W)	
R1195	ERJ3GEYJ220	22 / J / (1/10W)	
R1196	ERJ3GEYJ220	22 / J / (1/10W)	
R1197	ERJ3GEYJ220	22 / J / (1/10W)	
R1199	ERJ3GEY0R00	0-ohm Jumper	
R1205	ERJ3GEY0R00	0-ohm Jumper	
R1216	ERJ3GEYJ103	10K / J / (1/10W)	
R1218	ERJ3GEYJ103	10K / J / (1/10W)	
R1220	ERJ3GEYJ103	10K / J / (1/10W)	
R1222	ERJ3GEYJ103	10K / J / (1/10W)	
R1223	ERJ3GEYJ101	100 / J / (1/10W)	
R1224	ERJ3GEYJ220	22 / J / (1/10W)	
R1244	ERJ3GEYJ473	47K / J / (1/10W)	
R1245	ERJ3GEYJ473	47K / J / (1/10W)	
R1246	ERJ3GEYJ473	47K / J / (1/10W)	
R1247	ERJ3GEYJ473	47K / J / (1/10W)	
R1248	ERJ3GEYJ473	47K / J / (1/10W)	
R1249	ERJ3GEYJ473	47K / J / (1/10W)	
R1250	ERJ3GEYJ473	47K / J / (1/10W)	
R1251	ERJ3GEYJ473	47K / J / (1/10W)	
R1252	ERJ3GEYJ473	47K / J / (1/10W)	
R1253	ERJ3GEYJ473	47K / J / (1/10W)	
R1254	ERJ3GEYJ473	47K / J / (1/10W)	
R1255	ERJ3GEYJ473	47K / J / (1/10W)	
R1256	ERJ3GEYJ473	47K / J / (1/10W)	
R1257	ERJ3GEYJ473	47K / J / (1/10W)	
R1258	ERJ3GEYJ473	47K / J / (1/10W)	
R1259	ERJ3GEYJ334	330K / J / (1/10W)	
R1260	ERJ3GEYJ334	330K / J / (1/10W)	
R1261	ERJ3GEYJ334	330K / J / (1/10W)	
R1262	ERJ3GEYJ334	330K / J / (1/10W)	
R1263	ERJ3GEYJ473	47K / J / (1/10W)	
R1264	ERJ3GEYJ334	330K / J / (1/10W)	
R1265	ERJ3GEYJ224	220K / J / (1/10W)	
R1266	ERJ3GEYJ334	330K / J / (1/10W)	
R1267	ERJ3GEYJ334	330K / J / (1/10W)	
R1268	ERJ3GEYJ334	330K / J / (1/10W)	
R1269	ERJ3GEYJ224	220K / J / (1/10W)	
R1270	ERJ3GEYJ334	330K / J / (1/10W)	
R1271	ERJ3GEYJ334	330K / J / (1/10W)	
R1272	ERJ3GEYJ224	220K / J / (1/10W)	
R1273	ERJ3GEYJ334	330K / J / (1/10W)	
R1274	ERJ3GEYJ224	220K / J / (1/10W)	
R1275	ERJ3GEYJ334	330K / J / (1/10W)	
R1276	ERJ3GEYJ332	3.3K / J / (1/10W)	
R1277	ERJ3GEYJ332	3.3K / J / (1/10W)	
R1278	ERJ3GEYJ332	3.3K / J / (1/10W)	
R1279	ERJ3GEYJ332	3.3K / J / (1/10W)	
R1280	ERJ3GEYJ332	3.3K / J / (1/10W)	
R1281	ERJ3GEYJ332	3.3K / J / (1/10W)	
R1282	ERJ3GEYJ332	3.3K / J / (1/10W)	
R1283	ERJ3GEYJ332	3.3K / J / (1/10W)	
R1284	ERJ3GEYJ332	3.3K / J / (1/10W)	
R1285	ERJ3GEYJ332	3.3K / J / (1/10W)	
R1286	ERJ3GEYJ332	3.3K / J / (1/10W)	
R1287	ERJ3GEYJ332	3.3K / J / (1/10W)	
R1288	ERJ3GEYJ332	3.3K / J / (1/10W)	
R1289	ERJ3GEYJ332	3.3K / J / (1/10W)	
R1290	ERJ3GEYJ332	3.3K / J / (1/10W)	
R1291	ERJ3GEYJ332	3.3K / J / (1/10W)	
R1309	ERJ3GEYJ473	47K / J / (1/10W)	

Ref. No.	Part No.	Part Name & Description	Remarks
R1310	ERJ3GEYJ103	10K / J / (1/10W)	
R1311	ERJ3GEYJ681	680 / J / (1/10W)	
R1312	ERJ3GEYJ272	2.7K / J / (1/10W)	
R1313	ERJ3EKF1002V	10K / F / (1/16W)	
R1314	ERJ3GEY0R00	0-ohm Jumper	
R1315	ERJ3GEYJ472	4.7K / J / (1/10W)	
R1316	ERJ3GEYJ222	2.2K / J / (1/10W)	
R1317	ERJ3GEY0R00	0-ohm Jumper	
R1320	ERJ3GEYJ681	680 / J / (1/10W)	
R1322	ERJ3GEYJ201	200 / J / (1/10W)	
R1325	ERJ3GEYJ103	10K / J / (1/10W)	
R1327	ERJ3GEY0R00	0-ohm Jumper	
R1329	ERJ3GEYJ103	10K / J / (1/10W)	
R1331	ERJ3GEYJ103	10K / J / (1/10W)	
R1332	ERJ3GEYJ103	10K / J / (1/10W)	
R1334	ERJ3GEYJ103	10K / J / (1/10W)	
R1335	ERJ3GEYJ103	10K / J / (1/10W)	
R1336	ERJ3GEYJ103	10K / J / (1/10W)	
R1337	ERJ3GEYJ681	680 / J / (1/10W)	
R1338	ERJ3GEYJ681	680 / J / (1/10W)	
R1339	ERJ3GEYJ103	10K / J / (1/10W)	
R1340	ERJ3GEYJ103	10K / J / (1/10W)	
R1341	ERJ3GEYJ103	10K / J / (1/10W)	
R1342	ERJ3GEYJ103	10K / J / (1/10W)	
R1343	ERJ3GEYJ103	10K / J / (1/10W)	
R1344	ERJ3GEYJ103	10K / J / (1/10W)	
R1345	ERJ3GEYJ103	10K / J / (1/10W)	
R1347	ERJ3GEYJ103	10K / J / (1/10W)	
R1348	ERJ3GEYJ272	2.7K / J / (1/10W)	
R1349	ERJ3GEYJ472	4.7K / J / (1/10W)	
R1350	ERJ3GEYJ103	10K / J / (1/10W)	
R1351	ERJ3GEYJ103	10K / J / (1/10W)	
R1352	ERJ3GEYJ103	10K / J / (1/10W)	
R1353	ERJ3GEYJ103	10K / J / (1/10W)	
R1354	ERJ3GEYJ103	10K / J / (1/10W)	
R1357	ERJ3GEYJ103	10K / J / (1/10W)	
R1358	ERJ3GEYJ103	10K / J / (1/10W)	
R1361	ERJ3GEY0R00	0-ohm Jumper	
R1363	ERJ3GEYJ103	10K / J / (1/10W)	
R1364	ERJ3GEYJ103	10K / J / (1/10W)	
R1365	ERJ3GEYJ103	10K / J / (1/10W)	
R1367	ERJ3GEY0R00	0-ohm Jumper	
R1369	ERJ3GEYJ103	10K / J / (1/10W)	
R1370	ERJ3GEYJ103	10K / J / (1/10W)	
R1371	ERJ3GEYJ103	10K / J / (1/10W)	
R1373	ERJ3GEYJ103	10K / J / (1/10W)	
R1377	ERJ3GEYJ103	10K / J / (1/10W)	
R1380	ERJ3GEYJ103	10K / J / (1/10W)	
R1381	ERJ3GEYJ220	22 / J / (1/10W)	
R1382	ERJ3GEYJ103	10K / J / (1/10W)	
R1383	ERJ3GEYJ103	10K / J / (1/10W)	
R1384	ERJ3GEYJ103	10K / J / (1/10W)	
R1386	ERJ3GEYJ103	10K / J / (1/10W)	
R1387	ERJ3GEYJ103	10K / J / (1/10W)	
R1388	ERJ3GEYJ103	10K / J / (1/10W)	
R1389	ERJ3GEYJ103	10K / J / (1/10W)	
R1390	ERJ3GEYJ103	10K / J / (1/10W)	
R1402	ERJ3GEYJ103	10K / J / (1/10W)	
R1403	ERJ3GEYJ103	10K / J / (1/10W)	
R1404	ERJ3GEYJ103	10K / J / (1/10W)	
R1405	ERJ3GEYJ472	4.7K / J / (1/10W)	
R1407	ERJ3GEYJ220	22 / J / (1/10W)	
R1408	ERJ3GEYJ220	22 / J / (1/10W)	
R1409	ERJ3GEYJ220	22 / J / (1/10W)	
R1410	ERJ3GEYJ220	22 / J / (1/10W)	
R1411	ERJ3GEYJ220	22 / J / (1/10W)	
R1414	ERJ3GEYJ220	22 / J / (1/10W)	
R1415	ERJ3GEYJ220	22 / J / (1/10W)	
R1416	ERJ3GEYJ220	22 / J / (1/10W)	
R1417	ERJ3GEYJ220	22 / J / (1/10W)	
R1418	ERJ3GEYJ220	22 / J / (1/10W)	
R1421	ERJ3GEYJ220	22 / J / (1/10W)	
R1422	ERJ3GEYJ220	22 / J / (1/10W)	

Ref. No.	Part No.	Part Name & Description	Remarks
Z1154	D0GZ220J0001	Resistor Array	
Z1155	D0GZ220J0001	Resistor Array	
Z1159	PJRAMNR14473	Resistor Array	
Z1160	PJRAMNR14473	Resistor Array	
Z1161	PJRAMNR14473	Resistor Array	
Z1162	PJRAMNR14473	Resistor Array	
CAPACITORS			
C1001	ECJ1VF1E104Z	0.1 / Z / 25V	
C1002	ECUX1H102KBV	1000P / K / 50V	
C1003	ECJ1VF1E104Z	0.1 / Z / 25V	
C1004	ECJ1VF1E104Z	0.1 / Z / 25V	
C1005	ECUX1H102KBV	1000P / K / 50V	
C1006	F2G1A1010013	100 / M / 10V	
C1007	ECUX1H102KBV	1000P / K / 50V	
C1008	F2G1A1010013	100 / M / 10V	
C1009	EZASCE220M	Capacitor Array	
C1010	EZASCE220M	Capacitor Array	
C1011	EZASCE220M	Capacitor Array	
C1012	EZASCE220M	Capacitor Array	
C1013	EZASCE220M	Capacitor Array	
C1014	EZASCE220M	Capacitor Array	
C1015	ECUX1H220JCV	22P / J / 50V	
C1016	F2G1A1010013	100 / M / 10V	
C1017	F2G1A1010013	100 / M / 10V	
C1018	ECUX1H220JCV	22P / J / 50V	
C1019	F2G1A1010013	100 / M / 10V	
C1020	F2G1A1010013	100 / M / 10V	
C1021	F2G1A1010013	100 / M / 10V	
C1022	F2G1A1010013	100 / M / 10V	
C1023	ECJ1VF1E104Z	0.1 / Z / 25V	
C1024	ECJ1VF1E104Z	0.1 / Z / 25V	
C1025	ECJ1VF1E104Z	0.1 / Z / 25V	
C1026	ECUX1H102KBV	1000P / K / 50V	
C1027	ECUX1H102KBV	1000P / K / 50V	
C1028	ECUX1H102KBV	1000P / K / 50V	
C1033	EZASCE220M	Capacitor Array	
C1034	EZASCE220M	Capacitor Array	
C1035	EZASCE220M	Capacitor Array	
C1036	EZASCE220M	Capacitor Array	
C1038	ECUX1H220JCV	22P / J / 50V	
C1039	ECUX1H220JCV	22P / J / 50V	
C1040	ECJ1VF1E104Z	0.1 / Z / 25V	
C1041	ECJ1VF1E104Z	0.1 / Z / 25V	
C1042	ECJ1VF1E104Z	0.1 / Z / 25V	
C1043	ECJ1VF1E104Z	0.1 / Z / 25V	
C1044	F2G0J4700012	47 / M / 6.3V	
C1045	F2G0J4700012	47 / M / 6.3V	
C1046	ECJ1VF1E104Z	0.1 / Z / 25V	
C1047	ECJ1VF1E104Z	0.1 / Z / 25V	
C1048	ECJ1VF1E104Z	0.1 / Z / 25V	
C1049	ECJ1VF1E104Z	0.1 / Z / 25V	
C1050	ECJ1VF1E104Z	0.1 / Z / 25V	
C1051	ECJ1VF1E104Z	0.1 / Z / 25V	
C1052	ECJ1VF1E104Z	0.1 / Z / 25V	
C1053	ECJ1VF1E104Z	0.1 / Z / 25V	
C1054	ECJ1VF1E104Z	0.1 / Z / 25V	
C1055	F2G1C1000014	100 / M / 16V	
C1056	F2G1C1000014	100 / M / 16V	
C1057	ECJ1VF1E104Z	0.1 / Z / 25V	
C1058	ECJ1VF1E104Z	0.1 / Z / 25V	
C1059	ECJ1VF1E104Z	0.1 / Z / 25V	
C1060	ECJ1VF1E104Z	0.1 / Z / 25V	
C1061	ECJ1VF1E104Z	0.1 / Z / 25V	
C1062	ECJ1VF1E104Z	0.1 / Z / 25V	
C1063	ECJ1VF1E104Z	0.1 / Z / 25V	
C1064	F2G1C1000014	100 / M / 16V	
C1065	ECJ1VF1E104Z	0.1 / Z / 25V	
C1066	F2G1C1000014	100 / M / 16V	
C1067	ECJ1VF1E104Z	0.1 / Z / 25V	
C1068	ECJ1VF1E104Z	0.1 / Z / 25V	
C1069	ECJ1VF1E104Z	0.1 / Z / 25V	
C1070	ECJ1VF1E104Z	0.1 / Z / 25V	
C1071	F2G1C1000014	100 / M / 16V	

Ref. No.	Part No.	Part Name & Description	Remarks
C1072	F2G1C1000014	100 / M / 16V	
C1073	ECJ1VF1E104Z	0.1 / Z / 25V	
C1074	ECJ1VF1E104Z	0.1 / Z / 25V	
C1075	ECJ1VF1E104Z	0.1 / Z / 25V	
C1076	ECJ1VF1E104Z	0.1 / Z / 25V	
C1079	F2G1C1000014	100 / M / 16V	
C1080	F2G1C1000014	100 / M / 16V	
C1081	ECUX1H220JCV	22P / J / 50V	
C1082	ECUX1H220JCV	22P / J / 50V	
C1083	ECJ1VF1E104Z	0.1 / Z / 25V	
C1084	ECJ1VF1E104Z	0.1 / Z / 25V	
C1086	ECJ1VF1E104Z	0.1 / Z / 25V	
C1087	ECJ1VF1E104Z	0.1 / Z / 25V	
C1089	ECJ1VF1E104Z	0.1 / Z / 25V	
C1090	ECJ1VF1E104Z	0.1 / Z / 25V	
C1091	ECJ1VF1E104Z	0.1 / Z / 25V	
C1092	ECJ1VF1E104Z	0.1 / Z / 25V	
C1095	ECJ1VF1E104Z	0.1 / Z / 25V	
C1096	ECJ1VF1E104Z	0.1 / Z / 25V	
C1097	ECJ1VF1E104Z	0.1 / Z / 25V	
C1098	ECJ1VF1E104Z	0.1 / Z / 25V	
C1099	ECJ1VF1E104Z	0.1 / Z / 25V	
C1100	ECJ1VF1E104Z	0.1 / Z / 25V	
C1101	ECJ1VF1E104Z	0.1 / Z / 25V	
C1102	ECJ1VF1E104Z	0.1 / Z / 25V	
C1103	F2G1C1000014	100 / M / 16V	
C1104	F2G1C1000014	100 / M / 16V	
C1105	F2G1C1000014	100 / M / 16V	
C1106	F2G1C1000014	100 / M / 16V	
C1107	ECJ1VF1E104Z	0.1 / Z / 25V	
C1108	ECJ1VF1E104Z	0.1 / Z / 25V	
C1109	ECJ1VF1E104Z	0.1 / Z / 25V	
C1110	ECJ1VF1E104Z	0.1 / Z / 25V	
C1111	ECJ1VF1E104Z	0.1 / Z / 25V	
C1112	ECJ1VF1E104Z	0.1 / Z / 25V	
C1113	ECJ1VF1E104Z	0.1 / Z / 25V	
C1114	ECJ1VF1E104Z	0.1 / Z / 25V	
C1115	ECJ1VF1E104Z	0.1 / Z / 25V	
C1116	ECJ1VF1E104Z	0.1 / Z / 25V	
C1117	ECJ1VF1E104Z	0.1 / Z / 25V	
C1118	ECJ1VF1E104Z	0.1 / Z / 25V	
C1119	F2G1C1000014	100 / M / 16V	
C1120	F2G1C1000014	100 / M / 16V	
C1121	ECJ1VF1E104Z	0.1 / Z / 25V	
C1122	ECJ1VF1E104Z	0.1 / Z / 25V	
C1123	ECJ1VF1E104Z	0.1 / Z / 25V	
C1124	ECJ1VF1E104Z	0.1 / Z / 25V	
C1125	ECJ1VF1E104Z	0.1 / Z / 25V	
C1126	ECJ1VF1E104Z	0.1 / Z / 25V	
C1127	ECJ1VF1E104Z	0.1 / Z / 25V	
C1128	F2G1C1000014	100 / M / 16V	
C1129	ECJ1VF1E104Z	0.1 / Z / 25V	
C1130	F2G1C1000014	100 / M / 16V	
C1131	ECJ1VF1E104Z	0.1 / Z / 25V	
C1132	ECJ1VF1E104Z	0.1 / Z / 25V	
C1133	ECJ1VF1E104Z	0.1 / Z / 25V	
C1134	ECJ1VF1E104Z	0.1 / Z / 25V	
C1135	F2G1C1000014	100 / M / 16V	
C1136	F2G1C1000014	100 / M / 16V	
C1137	ECJ1VF1E104Z	0.1 / Z / 25V	
C1138	ECJ1VF1E104Z	0.1 / Z / 25V	
C1139	ECJ1VF1E104Z	0.1 / Z / 25V	
C1140	ECJ1VF1E104Z	0.1 / Z / 25V	
C1143	F2G1C1000014	100 / M / 16V	
C1144	F2G1C1000014	100 / M / 16V	
C1145	ECUX1H220JCV	22P / J / 50V	
C1146	ECUX1H220JCV	22P / J / 50V	
C1147	ECJ1VF1E104Z	0.1 / Z / 25V	
C1148	ECJ1VF1E104Z	0.1 / Z / 25V	
C1150	ECJ1VF1E104Z	0.1 / Z / 25V	
C1151	ECJ1VF1E104Z	0.1 / Z / 25V	
C1153	ECJ1VF1E104Z	0.1 / Z / 25V	
C1154	ECJ1VF1E104Z	0.1 / Z / 25V	

Ref. No.	Part No.	Part Name & Description	Remarks
C1155	ECJ1VF1E104Z	0.1 / Z / 25V	
C1156	ECJ1VF1E104Z	0.1 / Z / 25V	
C1159	ECJ1VF1E104Z	0.1 / Z / 25V	
C1160	ECJ1VF1E104Z	0.1 / Z / 25V	
C1161	ECJ1VF1E104Z	0.1 / Z / 25V	
C1162	ECJ1VF1E104Z	0.1 / Z / 25V	
C1163	ECJ1VF1E104Z	0.1 / Z / 25V	
C1164	ECJ1VF1E104Z	0.1 / Z / 25V	
C1165	ECJ1VF1E104Z	0.1 / Z / 25V	
C1166	ECJ1VF1E104Z	0.1 / Z / 25V	
C1167	F2G1C1000014	100 / M / 16V	
C1168	F2G1C1000014	100 / M / 16V	
C1169	F2G1C1000014	100 / M / 16V	
C1170	F2G1C1000014	100 / M / 16V	
C1171	ECJ1VF1E104Z	0.1 / Z / 25V	
C1172	ECJ1VF1E104Z	0.1 / Z / 25V	
C1173	ECJ1VF1E104Z	0.1 / Z / 25V	
C1174	ECJ1VF1E104Z	0.1 / Z / 25V	
C1175	ECJ1VF1E104Z	0.1 / Z / 25V	
C1176	ECJ1VF1E104Z	0.1 / Z / 25V	
C1177	ECJ1VF1E104Z	0.1 / Z / 25V	
C1178	ECJ1VF1E104Z	0.1 / Z / 25V	
C1179	ECJ1VF1E104Z	0.1 / Z / 25V	
C1180	ECJ1VF1E104Z	0.1 / Z / 25V	
C1181	F2G0J4700012	47 / M / 6.3V	
C1182	F2G0J4700012	47 / M / 6.3V	
C1183	ECJ1VF1E104Z	0.1 / Z / 25V	
C1184	ECJ1VF1E104Z	0.1 / Z / 25V	
C1185	ECJ1VF1E104Z	0.1 / Z / 25V	
C1186	ECJ1VF1E104Z	0.1 / Z / 25V	
C1187	ECJ1VF1E104Z	0.1 / Z / 25V	
C1188	ECJ1VF1E104Z	0.1 / Z / 25V	
C1189	ECJ1VF1E104Z	0.1 / Z / 25V	
C1190	ECJ1VF1E104Z	0.1 / Z / 25V	
C1191	ECJ1VF1E104Z	0.1 / Z / 25V	
C1192	F2G1C1000014	100 / M / 16V	
C1193	F2G1C1000014	100 / M / 16V	
C1194	ECJ1VF1E104Z	0.1 / Z / 25V	
C1195	ECJ1VF1E104Z	0.1 / Z / 25V	
C1196	ECJ1VF1E104Z	0.1 / Z / 25V	
C1197	ECJ1VF1E104Z	0.1 / Z / 25V	
C1198	ECJ1VF1E104Z	0.1 / Z / 25V	
C1199	ECJ1VF1E104Z	0.1 / Z / 25V	
C1200	ECJ1VF1E104Z	0.1 / Z / 25V	
C1201	F2G1C1000014	100 / M / 16V	
C1202	ECJ1VF1E104Z	0.1 / Z / 25V	
C1203	F2G1C1000014	100 / M / 16V	
C1204	ECJ1VF1E104Z	0.1 / Z / 25V	
C1205	ECJ1VF1E104Z	0.1 / Z / 25V	
C1206	ECJ1VF1E104Z	0.1 / Z / 25V	
C1207	ECJ1VF1E104Z	0.1 / Z / 25V	
C1208	F2G1C1000014	100 / M / 16V	
C1209	F2G1C1000014	100 / M / 16V	
C1210	ECJ1VF1E104Z	0.1 / Z / 25V	
C1211	ECJ1VF1E104Z	0.1 / Z / 25V	
C1212	ECJ1VF1E104Z	0.1 / Z / 25V	
C1213	ECJ1VF1E104Z	0.1 / Z / 25V	
C1216	F2G1C1000014	100 / M / 16V	
C1217	F2G1C1000014	100 / M / 16V	
C1218	ECUX1H220JCV	22P / J / 50V	
C1219	ECUX1H220JCV	22P / J / 50V	
C1220	ECJ1VF1E104Z	0.1 / Z / 25V	
C1221	ECJ1VF1E104Z	0.1 / Z / 25V	
C1222	ECJ1VF1E104Z	0.1 / Z / 25V	
C1223	ECJ1VF1E104Z	0.1 / Z / 25V	
C1224	ECJ1VF1E104Z	0.1 / Z / 25V	
C1226	ECJ1VF1E104Z	0.1 / Z / 25V	
C1227	ECJ1VF1E104Z	0.1 / Z / 25V	
C1228	ECJ1VF1E104Z	0.1 / Z / 25V	
C1229	ECJ1VF1E104Z	0.1 / Z / 25V	
C1232	ECJ1VF1E104Z	0.1 / Z / 25V	
C1233	ECJ1VF1E104Z	0.1 / Z / 25V	
C1234	ECJ1VF1E104Z	0.1 / Z / 25V	

Ref. No.	Part No.	Part Name & Description	Remarks
C1235	ECJ1VF1E104Z	0.1 / Z / 25V	
C1236	ECJ1VF1E104Z	0.1 / Z / 25V	
C1237	ECJ1VF1E104Z	0.1 / Z / 25V	
C1238	ECJ1VF1E104Z	0.1 / Z / 25V	
C1239	ECJ1VF1E104Z	0.1 / Z / 25V	
C1240	F2G1C1000014	100 / M / 16V	
C1241	F2G1C1000014	100 / M / 16V	
C1242	F2G1C1000014	100 / M / 16V	
C1243	F2G1C1000014	100 / M / 16V	
C1244	ECJ1VF1E104Z	0.1 / Z / 25V	
C1245	ECJ1VF1E104Z	0.1 / Z / 25V	
C1246	ECJ1VF1E104Z	0.1 / Z / 25V	
C1247	ECJ1VF1E104Z	0.1 / Z / 25V	
C1248	ECJ1VF1E104Z	0.1 / Z / 25V	
C1249	ECJ1VF1E104Z	0.1 / Z / 25V	
C1250	ECUX1H102KBV	1000P / K / 50V	
C1251	ECUX1H102KBV	1000P / K / 50V	
C1252	ECJ1VF1E104Z	0.1 / Z / 25V	
C1253	ECUX1H102KBV	1000P / K / 50V	
C1254	ECUX1H331JCV	330P / J / 50V	
C1255	ECUX1H102KBV	1000P / K / 50V	
C1256	ECUX1H220JCV	22P / J / 50V	
C1257	ECUX1H220JCV	22P / J / 50V	
C1258	ECJ1VF1E104Z	0.1 / Z / 25V	
C1259	ECJ1VF1E104Z	0.1 / Z / 25V	
C1260	ECJ1VF1E104Z	0.1 / Z / 25V	
C1261	ECJ1VF1E104Z	0.1 / Z / 25V	
C1262	ECJ1VF1E104Z	0.1 / Z / 25V	
C1263	ECJ1VF1E104Z	0.1 / Z / 25V	
C1264	ECJ1VF1E104Z	0.1 / Z / 25V	
C1265	ECJ1VF1E104Z	0.1 / Z / 25V	
C1266	ECJ1VF1E104Z	0.1 / Z / 25V	
C1267	ECJ1VF1E104Z	0.1 / Z / 25V	
C1268	ECUX1H102KBV	1000P / K / 50V	
C1269	ECUX1H102KBV	1000P / K / 50V	
C1270	ECUX1H102KBV	1000P / K / 50V	
C1271	ECUX1H102KBV	1000P / K / 50V	
C1272	ECUX1H102KBV	1000P / K / 50V	
C1273	ECJ1VF1E104Z	0.1 / Z / 25V	
C1274	ECJ1VF1E104Z	0.1 / Z / 25V	
C1275	ECJ1VF1E104Z	0.1 / Z / 25V	
C1276	ECJ1VF1E104Z	0.1 / Z / 25V	
C1277	ECJ1VF1E104Z	0.1 / Z / 25V	
C1278	ECUX1H102KBV	1000P / K / 50V	
C1279	ECUX1H102KBV	1000P / K / 50V	
C1280	ECUX1H102KBV	1000P / K / 50V	
C1281	ECUX1H102KBV	1000P / K / 50V	
C1282	ECUX1H102KBV	1000P / K / 50V	
C1283	ECJ1VF1E104Z	0.1 / Z / 25V	
C1284	ECJ1VF1E104Z	0.1 / Z / 25V	
C1285	ECJ1VF1E104Z	0.1 / Z / 25V	
C1286	ECJ1VF1E104Z	0.1 / Z / 25V	
C1287	ECUX1H102KBV	1000P / K / 50V	
C1288	ECUX1H102KBV	1000P / K / 50V	
C1289	ECUX1H102KBV	1000P / K / 50V	
C1290	ECUX1H102KBV	1000P / K / 50V	
C1291	ECJ1VF1E104Z	0.1 / Z / 25V	
C1292	ECJ1VF1E104Z	0.1 / Z / 25V	
C1293	ECJ1VF1E104Z	0.1 / Z / 25V	
C1294	ECUX1H102KBV	1000P / K / 50V	
C1295	ECUX1H102KBV	1000P / K / 50V	
C1296	ECUX1H102KBV	1000P / K / 50V	
C1297	ECUX1H331JCV	330P / J / 50V	
C1298	ECUX1H102KBV	1000P / K / 50V	
C1300	ECUX1H220JCV	22P / J / 50V	
C1301	ECJ1VF1E104Z	0.1 / Z / 25V	
C1302	ECJ1VF1E104Z	0.1 / Z / 25V	
C1303	ECJ1VF1E104Z	0.1 / Z / 25V	
C1304	ECJ1VF1E104Z	0.1 / Z / 25V	
C1305	ECJ1VF1E104Z	0.1 / Z / 25V	
C1306	ECJ1VF1E104Z	0.1 / Z / 25V	
C1307	ECJ1VF1E104Z	0.1 / Z / 25V	
C1308	ECJ1VF1E104Z	0.1 / Z / 25V	

Ref. No.	Part No.	Part Name & Description	Remarks
C1309	ECJ1VF1E104Z	0.1 / Z / 25V	
C1310	ECUX1H102KBV	1000P / K / 50V	
C1311	ECUX1H102KBV	1000P / K / 50V	
C1312	ECUX1H102KBV	1000P / K / 50V	
C1313	ECUX1H102KBV	1000P / K / 50V	
C1314	ECUX1H102KBV	1000P / K / 50V	
C1315	ECJ1VF1E104Z	0.1 / Z / 25V	
C1316	ECJ1VF1E104Z	0.1 / Z / 25V	
C1317	ECJ1VF1E104Z	0.1 / Z / 25V	
C1318	ECJ1VF1E104Z	0.1 / Z / 25V	
C1319	ECUX1H102KBV	1000P / K / 50V	
C1320	ECJ1VF1E104Z	0.1 / Z / 25V	
C1321	ECUX1H102KBV	1000P / K / 50V	
C1322	ECUX1H102KBV	1000P / K / 50V	
C1323	ECUX1H102KBV	1000P / K / 50V	
C1324	ECJ1VF1E104Z	0.1 / Z / 25V	
C1325	ECUX1H102KBV	1000P / K / 50V	
C1326	ECJ1VF1E104Z	0.1 / Z / 25V	
C1327	ECJ1VF1E104Z	0.1 / Z / 25V	
C1328	ECJ1VF1E104Z	0.1 / Z / 25V	
C1329	ECUX1H102KBV	1000P / K / 50V	
C1330	ECUX1H102KBV	1000P / K / 50V	
C1331	ECUX1H102KBV	1000P / K / 50V	
C1332	ECUX1H102KBV	1000P / K / 50V	
C1333	ECJ1VF1E104Z	0.1 / Z / 25V	
C1334	ECJ1VF1E104Z	0.1 / Z / 25V	
C1335	ECJ1VF1E104Z	0.1 / Z / 25V	
C1336	ECUX1H102KBV	1000P / K / 50V	
C1337	ECUX1H102KBV	1000P / K / 50V	
C1338	ECUX1H102KBV	1000P / K / 50V	
C1339	ECJ1VF1E104Z	0.1 / Z / 25V	
C1341	ECJ1VF1E104Z	0.1 / Z / 25V	
C1343	ECJ1VF1E104Z	0.1 / Z / 25V	
C1344	ECUX1H102KBV	1000P / K / 50V	
C1345	ECUX1H101JCV	100P / J / 50V	
C1352	ECJ1VF1E104Z	0.1 / Z / 25V	
C1356	ECUX1H102KBV	1000P / K / 50V	
C1357	ECUX1H101JCV	100P / J / 50V	
C1364	ECJ1VF1E104Z	0.1 / Z / 25V	
C1366	ECJ1VF1E104Z	0.1 / Z / 25V	
C1367	ECUX1H102KBV	1000P / K / 50V	
C1369	ECUX1H101JCV	100P / J / 50V	
C1371	ECJ1VF1E104Z	0.1 / Z / 25V	
C1373	ECJ1VF1E104Z	0.1 / Z / 25V	
C1374	ECUX1H102KBV	1000P / K / 50V	
C1375	ECUX1H101JCV	100P / J / 50V	
C1382	ECJ1VF1E104Z	0.1 / Z / 25V	
C1386	ECUX1H102KBV	1000P / K / 50V	
C1387	ECUX1H101JCV	100P / J / 50V	
C1394	ECJ1VF1E104Z	0.1 / Z / 25V	
C1396	ECJ1VF1E104Z	0.1 / Z / 25V	
C1397	ECUX1H102KBV	1000P / K / 50V	
C1399	ECUX1H101JCV	100P / J / 50V	
C1402	ECJ1VF1E104Z	0.1 / Z / 25V	
C1403	ECJ1VF1E104Z	0.1 / Z / 25V	
C1404	ECJ1VF1E104Z	0.1 / Z / 25V	
C1405	ECUX1H102KBV	1000P / K / 50V	
C1407	ECUX1H102KBV	1000P / K / 50V	
C1408	ECUX1H101JCV	100P / J / 50V	
C1411	ECUX1H101JCV	100P / J / 50V	
C1412	ECUX1H101JCV	100P / J / 50V	
C1415	ECJ1VF1E104Z	0.1 / Z / 25V	
C1416	ECUX1H102KBV	1000P / K / 50V	
C1417	ECUX1H102KBV	1000P / K / 50V	
C1418	ECJ1VF1E104Z	0.1 / Z / 25V	
C1419	ECJ1VF1E104Z	0.1 / Z / 25V	
C1420	ECUX1H101JCV	100P / J / 50V	
C1423	ECJ1VF1E104Z	0.1 / Z / 25V	
C1424	ECJ1VF1E104Z	0.1 / Z / 25V	
C1425	ECJ1VF1E104Z	0.1 / Z / 25V	
C1426	ECUX1H102KBV	1000P / K / 50V	
C1428	ECUX1H102KBV	1000P / K / 50V	
C1429	ECUX1H101JCV	100P / J / 50V	

Ref. No.	Part No.	Part Name & Description	Remarks
C1432	ECUX1H101JCV	100P / J / 50V	
C1433	ECUX1H101JCV	100P / J / 50V	
C1436	ECJ1VF1E104Z	0.1 / Z / 25V	
C1437	ECUX1H102KBV	1000P / K / 50V	
C1438	ECUX1H102KBV	1000P / K / 50V	
C1439	ECJ1VF1E104Z	0.1 / Z / 25V	
C1440	ECJ1VF1E104Z	0.1 / Z / 25V	
C1441	ECUX1H101JCV	100P / J / 50V	
C1444	ECJ1VF1E104Z	0.1 / Z / 25V	
C1445	ECJ1VF1E104Z	0.1 / Z / 25V	
C1446	ECJ1VF1E104Z	0.1 / Z / 25V	
C1447	ECUX1H102KBV	1000P / K / 50V	
C1449	ECUX1H102KBV	1000P / K / 50V	
C1452	ECUX1H101JCV	100P / J / 50V	
C1453	ECUX1H101JCV	100P / J / 50V	
C1455	ECUX1H101JCV	100P / J / 50V	
C1456	ECUX1H102KBV	1000P / K / 50V	
C1457	ECJ1VF1E104Z	0.1 / Z / 25V	
C1459	ECJ1VF1E104Z	0.1 / Z / 25V	
C1460	ECJ1VF1E104Z	0.1 / Z / 25V	
C1461	ECUX1H102KBV	1000P / K / 50V	
C1462	ECUX1H101JCV	100P / J / 50V	
C1466	ECJ1VF1E104Z	0.1 / Z / 25V	
C1467	ECJ1VF1E104Z	0.1 / Z / 25V	
C1468	ECJ1VF1E104Z	0.1 / Z / 25V	
C1469	ECUX1H102KBV	1000P / K / 50V	
C1471	ECUX1H102KBV	1000P / K / 50V	
C1474	ECUX1H101JCV	100P / J / 50V	
C1475	ECUX1H101JCV	100P / J / 50V	
C1477	ECUX1H101JCV	100P / J / 50V	
C1478	ECUX1H102KBV	1000P / K / 50V	
C1479	ECJ1VF1E104Z	0.1 / Z / 25V	
C1481	ECJ1VF1E104Z	0.1 / Z / 25V	
C1482	ECJ1VF1E104Z	0.1 / Z / 25V	
C1483	ECUX1H102KBV	1000P / K / 50V	
C1484	ECUX1H101JCV	100P / J / 50V	
C1491	ECUX1H102KBV	1000P / K / 50V	
C1492	ECUX1H102KBV	1000P / K / 50V	
C1493	ECJ1VF1E104Z	0.1 / Z / 25V	
C1494	ECJ1VF1E104Z	0.1 / Z / 25V	
C1499	ECJ1VF1E104Z	0.1 / Z / 25V	
C1500	ECJ1VF1E104Z	0.1 / Z / 25V	
C1501	ECJ1VF1E104Z	0.1 / Z / 25V	
C1502	ECJ1VF1E104Z	0.1 / Z / 25V	
C1512	ECJ1VF1E104Z	0.1 / Z / 25V	
C1513	ECJ1VF1E104Z	0.1 / Z / 25V	
C1514	ECJ1VF1E104Z	0.1 / Z / 25V	
C1516	ECJ1VF1E104Z	0.1 / Z / 25V	
C1518	ECJ1VF1E104Z	0.1 / Z / 25V	
C1519	ECJ1VF1E104Z	0.1 / Z / 25V	
C1520	ECJ1VF1E104Z	0.1 / Z / 25V	
C1521	ECJ1VF1E104Z	0.1 / Z / 25V	
C1523	ECJ1VF1E104Z	0.1 / Z / 25V	
C1524	F2G1C1000014	100 / M / 16V	
C1530	ECJ1VF1E104Z	0.1 / Z / 25V	
C1531	ECJ1VF1E104Z	0.1 / Z / 25V	
C1532	ECJ1VF1E104Z	0.1 / Z / 25V	
C1534	ECUX1H102KBV	1000P / K / 50V	
C1535	ECJ1VF1E104Z	0.1 / Z / 25V	
C1536	ECJ1VF1E104Z	0.1 / Z / 25V	
C1537	ECJ1VF1E104Z	0.1 / Z / 25V	
C1538	ECJ1VF1E104Z	0.1 / Z / 25V	
C1539	ECJ1VF1E104Z	0.1 / Z / 25V	
C1543	ECUX1H102KBV	1000P / K / 50V	
C1544	ECUX1H102KBV	1000P / K / 50V	
C1545	ECJ1VF1E104Z	0.1 / Z / 25V	
C1547	ECJ1VF1E104Z	0.1 / Z / 25V	
C1548	ECJ1VF1E104Z	0.1 / Z / 25V	
C1553	ECUX1H102KBV	1000P / K / 50V	
C1554	ECJ1VF1E104Z	0.1 / Z / 25V	
C1555	ECJ1VF1E104Z	0.1 / Z / 25V	
C1556	ECJ1VF1E104Z	0.1 / Z / 25V	
C1557	ECJ1VF1E104Z	0.1 / Z / 25V	

Ref. No.	Part No.	Part Name & Description	Remarks
C1563	ECJ1VB1A474K	0.47 / K / 10V	
C1564	ECJ1VB1A474K	0.47 / K / 10V	
C1565	ECJ1VF1E104Z	0.1 / Z / 25V	
C1566	ECJ1VF1E104Z	0.1 / Z / 25V	
C1567	ECJ1VF1E104Z	0.1 / Z / 25V	
C1568	ECJ1VF1E104Z	0.1 / Z / 25V	
C1569	ECUX1H102KBV	1000P / K / 50V	
C1570	ECUX1H102KBV	1000P / K / 50V	
C1571	ECJ1VF1E104Z	0.1 / Z / 25V	
C1572	ECUX1H102KBV	1000P / K / 50V	
C1573	ECJ1VF1E104Z	0.1 / Z / 25V	
C1574	ECUX1H102KBV	1000P / K / 50V	
C1575	ECUX1H102KBV	1000P / K / 50V	
C1576	ECJ1VF1E104Z	0.1 / Z / 25V	
C1577	ECUX1H102KBV	1000P / K / 50V	
C1578	ECJ1VF1E104Z	0.1 / Z / 25V	
C1579	ECJ1VF1E104Z	0.1 / Z / 25V	
C1580	ECJ1VF1E104Z	0.1 / Z / 25V	
C1581	ECJ1VF1E104Z	0.1 / Z / 25V	
C1582	ECJ1VF1E104Z	0.1 / Z / 25V	
C1583	ECUX1H102KBV	1000P / K / 50V	
C1584	ECUX1H102KBV	1000P / K / 50V	
C1585	ECUX1H102KBV	1000P / K / 50V	
C1586	ECUX1H102KBV	1000P / K / 50V	
C1587	ECJ1VF1E104Z	0.1 / Z / 25V	
C1588	ECUX1H102KBV	1000P / K / 50V	
C1589	ECUX1H101JCV	100P / J / 50V	
C1590	ECJ1VF1E104Z	0.1 / Z / 25V	
C1591	ECJ1VF1E104Z	0.1 / Z / 25V	
C1592	ECJ1VF1E104Z	0.1 / Z / 25V	
C1593	ECJ1VF1E104Z	0.1 / Z / 25V	
C1594	ECUX1H102KBV	1000P / K / 50V	
C1595	ECUX1H102KBV	1000P / K / 50V	
C1596	ECUX1H102KBV	1000P / K / 50V	
C1597	ECUX1H102KBV	1000P / K / 50V	
C1598	ECUX1H102KBV	1000P / K / 50V	
C1599	ECJ1VF1E104Z	0.1 / Z / 25V	
C1600	ECUX1H101JCV	100P / J / 50V	
C1603	F2G1C1000014	100 / M / 16V	
C1604	F2G1C1000014	100 / M / 16V	
C1605	F2G1C1000014	100 / M / 16V	
COILS			
L1001	BLM11A601SPT	Chip Coil	
L1002	G1C220KA0057	Coil	
L1003	G1C220KA0057	Coil	
L1004	BLM11A601SPT	Chip Coil	
L1005	BLM11A601SPT	Chip Coil	
L1006	BLM11A601SPT	Chip Coil	
L1007	BLM11A601SPT	Chip Coil	
L1008	G1C220KA0057	Coil	
L1009	G1C220KA0057	Coil	
L1010	BLM11A601SPT	Chip Coil	
L1011	BLM11A601SPT	Chip Coil	
L1012	BLM11A601SPT	Chip Coil	
L1013	BLM11A601SPT	Chip Coil	
L1014	BLM11A601SPT	Chip Coil	
L1015	G1C220KA0057	Coil	
L1016	G1C220KA0057	Coil	
L1017	BLM11A601SPT	Chip Coil	
L1018	BLM11A601SPT	Chip Coil	
L1019	BLM11A601SPT	Chip Coil	
L1020	BLM11A601SPT	Chip Coil	
L1021	BLM11A601SPT	Chip Coil	
L1022	BLM11A601SPT	Chip Coil	
L1023	BLM11A601SPT	Chip Coil	
L1024	BLM11A601SPT	Chip Coil	
L1025	BLM11A601SPT	Chip Coil	
L1026	BLM11A601SPT	Chip Coil	
L1027	BLM11A601SPT	Chip Coil	
L1028	BLM11A601SPT	Chip Coil	
L1029	BLM11A601SPT	Chip Coil	
L1030	BLM11A601SPT	Chip Coil	
L1031	BLM11A601SPT	Chip Coil	

Ref. No.	Part No.	Part Name & Description	Remarks
L1032	BLM11A601SPT	Chip Coil	
L1033	BLM11A601SPT	Chip Coil	
L1034	BLM11A601SPT	Chip Coil	
L1035	BLM11A601SPT	Chip Coil	
L1036	BLM11A601SPT	Chip Coil	
L1037	BLM11A601SPT	Chip Coil	
L1038	BLM11A601SPT	Chip Coil	
L1039	BLM11A601SPT	Chip Coil	
L1040	BLM11A601SPT	Chip Coil	
L1041	BLM11A601SPT	Chip Coil	
L1046	BLM11A601SPT	Chip Coil	
L1047	BLM11A601SPT	Chip Coil	
L1056	BLM11A601SPT	Chip Coil	
L1057	BLM11A601SPT	Chip Coil	
L1063	BLM11A601SPT	Chip Coil	
L1065	BLM11A601SPT	Chip Coil	
L1068	BLM11A601SPT	Chip Coil	
L1069	BLM11A601SPT	Chip Coil	
L1070	BLM11A601SPT	Chip Coil	
L1071	BLM11A601SPT	Chip Coil	
L1073	BLM11A601SPT	Chip Coil	
L1076	BLM11A601SPT	Chip Coil	
L1077	BLM11A601SPT	Chip Coil	
L1080	BLM11A601SPT	Chip Coil	
L1081	BLM11A601SPT	Chip Coil	
L1084	BLM11A601SPT	Chip Coil	
L1085	BLM11A601SPT	Chip Coil	
L1088	BLM11A601SPT	Chip Coil	
L1089	BLM11A601SPT	Chip Coil	
L1092	BLM11A601SPT	Chip Coil	
L1093	BLM11A601SPT	Chip Coil	
L1094	G1C220KA0057	Coil	
L1095	BLM11A601SPT	Chip Coil	
L1096	BLM11A601SPT	Chip Coil	
L1097	BLM11A601SPT	Chip Coil	
L1098	BLM11A601SPT	Chip Coil	
L1099	BLM11A601SPT	Chip Coil	
L1100	BLM11A601SPT	Chip Coil	
L1101	BLM11A601SPT	Chip Coil	
L1102	BLM11A601SPT	Chip Coil	
L1103	BLM11A601SPT	Chip Coil	
L1104	BLM11A601SPT	Chip Coil	
L1105	BLM11A601SPT	Chip Coil	
DIODES			
D1001	MA113	Diode	
D1002	MA113	Diode	
D1003	B3AAB0000085	LED	
D1004	B3AAB0000085	LED	
D1005	B3AAB0000085	LED	
D1006	B3AAB0000085	LED	
TRANSISTORS			
Q1001	B1GBCFLL0002	Transistor	
Q1009	B1GBCFLL0002	Transistor	
Q1010	B1GBCFLL0002	Transistor	
Q1011	B1GBCFLL0002	Transistor	
Q1012	B1GBCFLL0002	Transistor	
ICs			
IC1001	C0CBABG00032	IC Regulator	
IC1002	C0ABBA000063	IC Op Amp	
IC1003	C1DB00001241	IC	
IC1004	C1DB00001241	IC	
IC1005	C1DB00001241	IC	
IC1006	C1DB00001241	IC	
IC1007	C0CBABG00032	IC Regulator	
IC1008	C0ABBA000063	IC Op Amp	
IC1009	C1DB00001241	IC	
IC1010	C1DB00001241	IC	
IC1011	H1Z2605B0001	Oscillator	
IC1012	C1DB00000993	IC	
IC1013	C1DB00000993	IC	
IC1014	C3BBHG000091	SRAM	
IC1018	C3BBHG000091	SRAM	
IC1019	C3BBHG000091	SRAM	

Ref. No.	Part No.	Part Name & Description	Remarks
IC1023	C3BBHG000091	SRAM	
IC1024	C3BBHG000091	SRAM	
IC1026	C3BBHG000091	SRAM	
IC1027	C3BBHG000091	SRAM	
IC1029	C3BBHG000091	SRAM	
IC1030	C3BBHG000091	SRAM	
IC1032	C3BBHG000091	SRAM	
IC1033	C3BBHG000091	SRAM	
IC1035	C3BBHG000091	SRAM	
IC1040	C0ABCA000017	IC Op Amp	
IC1041	C0ABCA000017	IC Op Amp	
IC1042	C0BBCA000045	IC, Linear	
IC1043	C0BBCA000045	IC, Linear	
IC1044	C0JBAF000500	IC	
IC1045	C0JBAF000500	IC	
IC1046	C0FBBD000116	IC	
IC1047	C0FBBD000116	IC	
IC1048	C0FBBD000116	IC	
IC1049	C0EBE0000139	IC	
IC1050	C3EBEG000059	IC EEPROM	
IC1051	C0EBH0000227	IC Reset	
IC1053	C2CBYK000003	IC 16Bit CPU	
IC1054	SN74LVCC4245	IC	
IC1055	SN74LV02ANS2	IC	
IC1056	C0JBAA000267	IC	
IC1060	PJWI08070M	IC Flash Memory	
IC1062	C3BBHG000091	SRAM	
IC1064	C0JBAB000695	IC	
IC1067	C0JBAA000279	IC	
IC1068	C0JBAA000279	IC CMOS Logic	
IC1069	C0JBAA000279	IC	
IC1070	SN74LV32ANS2	IC	
OTHERS			
CN1001	K1KAJ0BA0054	Connector	
CN1002	K1KA12A00324	Connector	
CN1003	K1KA13A00132	Connector	
CN1004	K1KA06A00408	Connector	
CN1005	K1KA30A00062	Connector	
CN1008	K1KA10A00325	Connector	
X1001	H2D165500002	Oscillator	
	K1NC02Z00009	Connector	

15.2. INTERFACE Board

Ref. No.	Part No.	Part Name & Description	Remarks
RESISTORS			
R3000	ERJ3GEYJ220	22 / J / (1/10W)	
R3001	ERJ3GEYJ220	22 / J / (1/10W)	
R3002	ERJ3GEYJ220	22 / J / (1/10W)	
R3003	ERJ3GEYJ102	1K / J / (1/10W)	
R3004	ERJ3GEYJ103	10K / J / (1/10W)	
R3005	ERJ3GEYJ103	10K / J / (1/10W)	
R3006	ERJ3GEYJ102	1K / J / (1/10W)	
R3009	ERJ3GEYJ103	10K / J / (1/10W)	
R3010	ERJ3GEYJ103	10K / J / (1/10W)	
R3011	ERJ3GEYJ220	22 / J / (1/10W)	
R3012	ERJ3GEYJ220	22 / J / (1/10W)	
R3013	ERJ3GEY0R00	0-ohm Jumper	
R3014	ERJ3GEYJ220	22 / J / (1/10W)	
R3015	ERJ3GEYJ100	10 / J / (1/10W)	
R3016	ERJ3GEYJ100	10 / J / (1/10W)	
R3017	ERJ3GEY0R00	0-ohm Jumper	
R3019	ERJ3GEYJ100	10 / J / (1/10W)	
R3020	ERJ3GEYJ103	10K / J / (1/10W)	
R3021	ERJ3GEYJ102	1K / J / (1/10W)	
R3022	ERJ3GEYJ103	10K / J / (1/10W)	
R3026	ERJ3GEYJ100	10 / J / (1/10W)	
R3027	ERJ3GEYJ100	10 / J / (1/10W)	
R3030	ERJ3GEYJ100	10 / J / (1/10W)	
R3031	ERJ3GEYJ472	4.7K / J / (1/10W)	
R3040	ERJ3GEY0R00	0-ohm Jumper	
R3041	ERJ3GEYJ220	22 / J / (1/10W)	

Ref. No.	Part No.	Part Name & Description	Remarks
R3042	ERJ3GEY0R00	0-ohm Jumper	
R3043	ERJ3GEY0R00	0-ohm Jumper	
R3044	ERJ3GEY0R00	0-ohm Jumper	
R3045	ERJ3GEY0R00	0-ohm Jumper	
R3046	ERJ3GEYJ102	1K / J / (1/10W)	
R3047	ERJ3GEYJ100	10 / J / (1/10W)	
R3048	ERJ3GEYJ100	10 / J / (1/10W)	
R3049	ERJ3GEYJ100	10 / J / (1/10W)	
R3050	ERJ3GEYJ100	10 / J / (1/10W)	
R3051	ERJ3GEYJ100	10 / J / (1/10W)	
R3052	ERJ3GEYJ100	10 / J / (1/10W)	
R3053	ERJ3GEYJ100	10 / J / (1/10W)	
R3054	ERJ3GEYJ100	10 / J / (1/10W)	
R3055	ERJ3GEY0R00	0-ohm Jumper	
R3056	ERJ3GEY0R00	0-ohm Jumper	
R3057	ERJ3GEYJ100	10 / J / (1/10W)	
R3058	ERJ3GEYJ100	10 / J / (1/10W)	
R3059	ERJ3GEYJ100	10 / J / (1/10W)	
R3060	ERJ3GEYJ472	4.7K / J / (1/10W)	
R3061	ERJ3GEYJ472	4.7K / J / (1/10W)	
R3062	ERJ3GEYJ100	10 / J / (1/10W)	
R3063	ERJ3GEYJ100	10 / J / (1/10W)	
R3064	ERJ3GEYJ100	10 / J / (1/10W)	
R3065	ERJ3GEYJ100	10 / J / (1/10W)	
R3066	ERJ3GEYJ100	10 / J / (1/10W)	
R3067	ERJ3GEYJ100	10 / J / (1/10W)	
R3068	ERJ3GEYJ100	10 / J / (1/10W)	
R3069	ERJ3GEYJ100	10 / J / (1/10W)	
R3070	ERJ3GEYJ100	10 / J / (1/10W)	
R3071	ERJ3GEYJ100	10 / J / (1/10W)	
R3072	ERJ3GEYJ100	10 / J / (1/10W)	
R3073	ERJ3GEYJ100	10 / J / (1/10W)	
R3074	ERJ3GEY0R00	0-ohm Jumper	
R3075	ERJ3GEYJ472	4.7K / J / (1/10W)	
R3076	ERJ3GEYJ472	4.7K / J / (1/10W)	
R3077	ERJ3GEYJ472	4.7K / J / (1/10W)	
R3078	ERJ3GEYJ472	4.7K / J / (1/10W)	
R3079	ERJ3GEYJ472	4.7K / J / (1/10W)	
R3080	ERJ3GEYJ472	4.7K / J / (1/10W)	
R3081	ERJ3GEYJ472	4.7K / J / (1/10W)	
R3082	ERJ3GEYJ472	4.7K / J / (1/10W)	
R3086	ERJ3GEY0R00	0-ohm Jumper	
R3087	ERJ3GEY0R00	0-ohm Jumper	
R3089	ERJ3GEY0R00	0-ohm Jumper	
R3091	ERJ3GEY0R00	0-ohm Jumper	
R3092	ERJ3GEYJ101	100 / J / (1/10W)	
R3093	ERJ3GEYJ101	100 / J / (1/10W)	
R3095	ERJ3GEYJ101	100 / J / (1/10W)	
R3096	ERJ3GEYJ472	4.7K / J / (1/10W)	
R3097	ERJ3GEYJ472	4.7K / J / (1/10W)	
R3098	ERJ3GEYJ472	4.7K / J / (1/10W)	
R3099	ERJ3GEYJ472	4.7K / J / (1/10W)	
R3102	ERJ3GEY0R00	0-ohm Jumper	
R3103	ERJ3GEY0R00	0-ohm Jumper	
R3104	ERJ3GEYJ100	10 / J / (1/10W)	
R3106	ERJ3GEY0R00	0-ohm Jumper	
R3113	ERJ3GEY0R00	0-ohm Jumper	
R3115	ERJ3GEY0R00	0-ohm Jumper	
R3119	ERJ3GEYJ220	22 / J / (1/10W)	
R3120	ERJ3GEYJ220	22 / J / (1/10W)	
R3121	ERJ3GEYJ220	22 / J / (1/10W)	
R3122	ERJ3GEYJ220	22 / J / (1/10W)	
R3123	ERJ3GEYJ220	22 / J / (1/10W)	
R3124	ERJ3GEY0R00	0-ohm Jumper	
R3125	ERJ3GEYJ220	22 / J / (1/10W)	
R3126	ERJ3GEY0R00	0-ohm Jumper	
R3127	ERJ3GEYJ220	22 / J / (1/10W)	
R3128	ERJ3GEYJ103	10K / J / (1/10W)	
R3129	ERJ3GEYJ220	22 / J / (1/10W)	
R3131	ERJ3GEYJ102	1K / J / (1/10W)	
R3132	ERJ3GEYJ103	10K / J / (1/10W)	
R3133	D4FB1R25A005	Poly Switch	
R3135	ERJ3GEYJ223	22K / J / (1/10W)	

KV-S3105CSERIES / KV-S3085SERIES

Ref. No.	Part No.	Part Name & Description	Remarks
R3136	ERJ3GEYJ103	10K / J / (1/10W)	
R3138	ERJ3GEYJ103	10K / J / (1/10W)	
R3140	ERJ3GEYJ100	10 / J / (1/10W)	
R3141	ERJ3GEYJ220	22 / J / (1/10W)	
R3142	ERJ3GEYJ100	10 / J / (1/10W)	
R3143	ERJ3GEYJ103	10K / J / (1/10W)	
R3144	ERJ3GEYJ103	10K / J / (1/10W)	
R3145	ERJ3GEYJ103	10K / J / (1/10W)	
R3146	ERJ3GEYJ103	10K / J / (1/10W)	
R3147	ERJ3GEYJ103	10K / J / (1/10W)	
R3149	ERJ3GEYJ103	10K / J / (1/10W)	
R3151	ERJ3GEYJ100	10 / J / (1/10W)	
R3152	ERJ3GEYJ680	68/J/1/10W	
R3153	ERJ6ENF3011	3.01K / F / (1/10W)	
R3154	ERJ3GEYJ220	22 / J / (1/10W)	
R3155	ERJ3GEYJ220	22 / J / (1/10W)	
R3156	ERJ3GEYJ100	10 / J / (1/10W)	
R3158	ERJ3GEYJ220	22 / J / (1/10W)	
R3159	ERJ3GEYJ220	22 / J / (1/10W)	
R3160	ERJ3GEYJ220	22 / J / (1/10W)	
R3161	ERJ3GEYJ103	10K / J / (1/10W)	
R3162	ERJ3GEYJ680	68/J/1/10W	
R3163	ERJ3GEYJ100	10 / J / (1/10W)	
R3164	ERJ3GEYJ104	100K / J / (1/10W)	
R3166	ERJ3GEYJ100	10 / J / (1/10W)	
R3168	ERJ3GEYJ220	22 / J / (1/10W)	
R3169	ERJ3GEYJ220	22 / J / (1/10W)	
R3170	ERJ3GEYJ220	22 / J / (1/10W)	
R3171	ERJ3GEYJ220	22 / J / (1/10W)	
R3172	ERJ3GEYJ820	82 / J / (1/10W)	
R3173	ERJ3GEYJ220	22 / J / (1/10W)	
R3174	ERJ3GEYJ220	22 / J / (1/10W)	
R3175	ERJ3GEYJ680	68/J/1/10W	
R3177	ERJ3GEY0R00	0-ohm Jumper	
R3178	ERJ3GEYJ103	10K / J / (1/10W)	
R3179	ERJ3GEYJ103	10K / J / (1/10W)	
R3180	ERJ3GEYJ220	22 / J / (1/10W)	
R3181	ERJ3GEY0R00	0-ohm Jumper	
R3182	ERJ3GEYJ220	22 / J / (1/10W)	
R3183	ERJ3GEYJ100	10 / J / (1/10W)	
R3184	ERJ3GEYJ105	1000K / J / (1/10W)	
R3185	ERJ3GEYJ100	10 / J / (1/10W)	
R3186	ERJ3GEYJ100	10 / J / (1/10W)	
R3187	ERJ3EKF6201V	6.2K / F / (1/16W)	
R3188	ERJ3GEY0R00	0-ohm Jumper	
R3189	ERJ3GEY0R00	0-ohm Jumper	
R3190	ERJ3GEYJ104	100K / J / (1/10W)	
R3191	ERJ3GEYJ103	10K / J / (1/10W)	
R3194	ERJ3GEYJ103	10K / J / (1/10W)	
R3196	ERJ3GEYJ103	10K / J / (1/10W)	
R3197	ERJ3GEYJ103	10K / J / (1/10W)	
R3198	ERJ3GEYJ103	10K / J / (1/10W)	
R3199	ERJ3GEYJ220	22 / J / (1/10W)	
R3200	ERJ3GEYJ220	22 / J / (1/10W)	
R3201	ERJ3GEYJ103	10K / J / (1/10W)	
R3202	ERJ3GEYJ201	200 / J / (1/10W)	
R3204	ERJ3GEYJ220	22 / J / (1/10W)	
R3205	ERJ3GEYJ103	10K / J / (1/10W)	
R3206	ERJ3GEY0R00	0-ohm Jumper	
R3207	ERJ3GEYJ220	22 / J / (1/10W)	
R3208	ERJ3GEYJ220	22 / J / (1/10W)	
R3209	ERJ3GEYJ220	22 / J / (1/10W)	
R3210	ERJ3GEYJ103	10K / J / (1/10W)	
R3211	ERJ3GEYJ103	10K / J / (1/10W)	
R3212	ERJ3GEYJ103	10K / J / (1/10W)	
R3213	ERJ3GEYJ103	10K / J / (1/10W)	
R3214	ERJ3GEYJ103	10K / J / (1/10W)	
R3215	ERJ3GEYJ103	10K / J / (1/10W)	
R3216	ERJ3GEYJ103	10K / J / (1/10W)	
R3217	ERJ3GEYJ220	22 / J / (1/10W)	
R3218	ERJ3GEYJ220	22 / J / (1/10W)	
R3219	ERJ3GEYJ220	22 / J / (1/10W)	
R3220	ERJ3GEYJ220	22 / J / (1/10W)	

Ref. No.	Part No.	Part Name & Description	Remarks
R3221	ERJ3GEYJ103	10K / J / (1/10W)	
R3223	ERJ3GEYJ103	10K / J / (1/10W)	
R3224	ERJ3GEYJ472	4.7K / J / (1/10W)	
R3225	ERJ3GEYJ221	220 / J / (1/10W)	
R3226	ERJ3GEYJ221	220 / J / (1/10W)	
R3227	ERJ3GEYJ221	220 / J / (1/10W)	
R3228	ERJ3GEYJ220	22 / J / (1/10W)	
R3229	ERJ3GEYJ221	220 / J / (1/10W)	
R3230	ERJ3GEYJ220	22 / J / (1/10W)	
R3231	ERJ3GEYJ220	22 / J / (1/10W)	
R3232	ERJ3GEYJ103	10K / J / (1/10W)	
R3235	ERJ3GEYJ103	10K / J / (1/10W)	
R3236	ERJ3GEYJ103	10K / J / (1/10W)	
R3237	ERJ3GEYJ220	22 / J / (1/10W)	
R3238	ERJ3GEYJ101	100 / J / (1/10W)	
R3239	ERJ3GEYJ472	4.7K / J / (1/10W)	
R3240	ERJ3GEYJ100	10 / J / (1/10W)	
R3241	ERJ3GEYJ100	10 / J / (1/10W)	
R3242	ERJ3GEYJ100	10 / J / (1/10W)	
R3244	ERJ3GEYJ220	22 / J / (1/10W)	
R3246	ERJ3GEYJ220	22 / J / (1/10W)	
R3247	ERJ3GEYJ220	22 / J / (1/10W)	
R3250	ERJ3GEYJ220	22 / J / (1/10W)	
R3251	ERJ3GEYJ103	10K / J / (1/10W)	
R3252	ERJ3GEY0R00	0-ohm Jumper	
R3253	ERJ3GEYJ103	10K / J / (1/10W) for KV-S3085 Series	
R3254	ERJ3GEYJ103	10K / J / (1/10W) for KV-S3105C Series	
R3256	ERJ3GEYJ103	10K / J / (1/10W)	
R3257	ERJ3GEYJ103	10K / J / (1/10W)	
R3258	ERJ3GEYJ103	10K / J / (1/10W)	
R3259	ERJ3GEYJ472	4.7K / J / (1/10W)	
Z3000	D0GZ220J0001	Resistor Array	
Z3001	D0GZ220J0001	Resistor Array	
Z3002	D0GZ220J0001	Resistor Array	
Z3003	D0GZ220J0001	Resistor Array	
Z3004	D0GZ220J0001	Resistor Array	
Z3005	D0GZ220J0001	Resistor Array	
Z3006	D0GZ220J0001	Resistor Array	
Z3007	D0GZ220J0001	Resistor Array	
Z3008	D0GZ220J0001	Resistor Array	
Z3009	D0GZ220J0001	Resistor Array	
Z3010	D0GZ220J0001	Resistor Array	
Z3011	D0GZ220J0001	Resistor Array	
Z3012	D0GZ220J0001	Resistor Array	
Z3013	D0GZ220J0001	Resistor Array	
Z3014	D0GZ220J0001	Resistor Array	
Z3015	D0GZ220J0001	Resistor Array	
Z3016	D0GZ220J0001	Resistor Array	
Z3017	D0GZ220J0001	Resistor Array	
Z3018	D0GZ220J0001	Resistor Array	
Z3019	PJRAMNR14473	Resistor Array	
Z3020	PJRAMNR14473	Resistor Array	
Z3033	D0GZ220J0001	Resistor Array	
Z3034	D0GZ220J0001	Resistor Array	
Z3035	D0GZ220J0001	Resistor Array	
Z3036	D0GZ220J0001	Resistor Array	
Z3037	D0GZ220J0001	Resistor Array	
Z3038	D0GZ220J0001	Resistor Array	
Z3039	D0GZ220J0001	Resistor Array	
Z3040	D0GZ220J0001	Resistor Array	
Z3041	D0GZ220J0001	Resistor Array	
Z3042	D0GZ220J0001	Resistor Array	
Z3043	D0GZ220J0001	Resistor Array	
Z3044	D0GZ220J0001	Resistor Array	
Z3045	D0GZ220J0001	Resistor Array	
Z3046	D0GZ220J0001	Resistor Array	
Z3047	D0GZ220J0001	Resistor Array	
Z3048	D0GZ220J0001	Resistor Array	
Z3049	D0GZ220J0001	Resistor Array	
Z3050	D0GZ220J0001	Resistor Array	
Z3051	D0GZ220J0001	Resistor Array	

Ref. No.	Part No.	Part Name & Description	Remarks
Z3052	D0GZ220J0001	Resistor Array	
Z3053	D0GZ220J0001	Resistor Array	
Z3054	D0GZ220J0001	Resistor Array	
Z3055	D0GZ220J0001	Resistor Array	
Z3056	D0GZ220J0001	Resistor Array	
Z3057	D0GZ220J0001	Resistor Array	
Z3058	D0GZ220J0001	Resistor Array	
Z3059	D0GZ220J0001	Resistor Array	
Z3060	D0GZ220J0001	Resistor Array	
Z3061	D0GZ220J0001	Resistor Array	
Z3062	D0GZ220J0001	Resistor Array	
Z3063	D1H810040003	Resistor Array	
Z3064	EXBV8VR000V	Resistor Array	
Z3065	D1H810040003	Resistor Array	
Z3066	EXBV8VR000V	Resistor Array	
Z3067	D1H810040003	Resistor Array	
Z3068	D1H810040003	Resistor Array	
Z3069	D1H810040003	Resistor Array	
Z3070	EXBV8VR000V	Resistor Array	
Z3071	D1H810040003	Resistor Array	
Z3072	EXBV8VR000V	Resistor Array	
Z3073	D1H810040003	Resistor Array	
Z3074	D1H810040003	Resistor Array	
Z3075	D1H810040003	Resistor Array	
Z3076	D1H810040003	Resistor Array	
Z3077	D1H810040003	Resistor Array	
Z3078	D1H810040003	Resistor Array	
Z3079	D1H810040003	Resistor Array	
Z3080	D0GZ220J0001	Resistor Array	
Z3081	D0GZ220J0001	Resistor Array	
Z3082	D0GZ220J0001	Resistor Array	
Z3083	D0GZ220J0001	Resistor Array	
Z3084	D1H810040003	Resistor Array	
Z3085	D1H810040003	Resistor Array	
Z3086	D1H810040003	Resistor Array	
Z3087	D1H810040003	Resistor Array	
Z3088	D1H810040003	Resistor Array	
Z3089	D1H810040003	Resistor Array	
Z3090	D1H810040003	Resistor Array	
Z3091	D1H810040003	Resistor Array	
Z3092	D1H810040003	Resistor Array	
Z3093	D0GZ220J0001	Resistor Array	
Z3094	D0GZ220J0001	Resistor Array	
Z3095	D0GZ220J0001	Resistor Array	
Z3096	D0GZ220J0001	Resistor Array	
Z3097	D0GZ220J0001	Resistor Array	
Z3098	D0GZ220J0001	Resistor Array	
Z3099	D0GZ220J0001	Resistor Array	
Z3100	D0GZ220J0001	Resistor Array	
Z3101	D0GZ220J0001	Resistor Array	
Z3102	D0GZ220J0001	Resistor Array	
Z3103	D0GZ220J0001	Resistor Array	
Z3104	D0GZ220J0001	Resistor Array	
Z3105	D0GZ220J0001	Resistor Array	
Z3106	D0GZ220J0001	Resistor Array	
Z3107	D0GZ220J0001	Resistor Array	
Z3108	D0GZ220J0001	Resistor Array	
Z3109	D0GZ220J0001	Resistor Array	
Z3110	D0GZ220J0001	Resistor Array	
Z3111	D0GZ220J0001	Resistor Array	
Z3112	D0GZ220J0001	Resistor Array	
Z3113	D0GZ220J0001	Resistor Array	
Z3114	D0GZ220J0001	Resistor Array	
Z3115	D0GZ220J0001	Resistor Array	
Z3116	D0GZ220J0001	Resistor Array	
Z3117	D0GZ220J0001	Resistor Array	
Z3118	D0GZ220J0001	Resistor Array	
Z3119	D0GZ220J0001	Resistor Array	
Z3120	D0GZ220J0001	Resistor Array	
Z3121	D0GZ220J0001	Resistor Array	
Z3122	D0GZ220J0001	Resistor Array	
Z3123	D0GZ220J0001	Resistor Array	
Z3124	D0GZ103J0001	Resistor Array	

Ref. No.	Part No.	Part Name & Description	Remarks
Z3125	D0GZ103J0001	Resistor Array	
Z3126	D0GZ103J0001	Resistor Array	
Z3127	D0GZ103J0001	Resistor Array	
Z3128	D0GZ103J0001	Resistor Array	
Z3129	D0GZ103J0001	Resistor Array	
Z3130	D0GZ103J0001	Resistor Array	
Z3131	D0GZ103J0001	Resistor Array	
Z3132	D0GZ103J0001	Resistor Array	
Z3133	D0GZ103J0001	Resistor Array	
Z3134	D0GZ103J0001	Resistor Array	
Z3135	D0GZ103J0001	Resistor Array	
CAPACITORS			
C3000	F2G1E4R70008	4.7 / M / 25V	
C3001	F2G1A1010013	100 / M / 10V	
C3002	ECUX1H101JCV	100P / J / 50V	
C3003	ECUX1H101JCV	100P / J / 50V	
C3004	ECJ1VF1E104Z	0.1 / Z / 25V	
C3005	F2G1A1010013	100 / M / 10V	
C3006	ECUX1H101JCV	100P / J / 50V	
C3007	ECJ1VF1E104Z	0.1 / Z / 25V	
C3008	ECJ1VF1E104Z	0.1 / Z / 25V	
C3009	ECUX1H101JCV	100P / J / 50V	
C3010	ECUX1H101JCV	100P / J / 50V	
C3011	F2G1A1010013	100 / M / 10V	
C3012	ECJ1VF1E104Z	0.1 / Z / 25V	
C3013	ECJ1VF1E104Z	0.1 / Z / 25V	
C3014	F2G1E4R70008	4.7 / M / 25V	
C3015	F2G1A1010013	100 / M / 10V	
C3016	ECUX1H101JCV	100P / J / 50V	
C3017	ECUX1H101JCV	100P / J / 50V	
C3018	F2G0G2210002	220 / M / 4V	
C3019	F2G0G2210002	220 / M / 4V	
C3020	ECJ1VF1E104Z	0.1 / Z / 25V	
C3021	ECJ1VF1E104Z	0.1 / Z / 25V	
C3022	F2G0G2210002	220 / M / 4V	
C3023	F2G0G2210002	220 / M / 4V	
C3024	ECJ1VF1E104Z	0.1 / Z / 25V	
C3025	ECJ1VF1E104Z	0.1 / Z / 25V	
C3026	ECUX1H101JCV	100P / J / 50V	
C3027	ECUX1H101JCV	100P / J / 50V	
C3028	ECJ1VF1E104Z	0.1 / Z / 25V	
C3029	ECJ1VF1E104Z	0.1 / Z / 25V	
C3030	ECJ1VF1E104Z	0.1 / Z / 25V	
C3031	ECJ1VF1E104Z	0.1 / Z / 25V	
C3032	ECUX1H101JCV	100P / J / 50V	
C3033	ECUX1H101JCV	100P / J / 50V	
C3034	ECUX1H101JCV	100P / J / 50V	
C3035	ECUX1H101JCV	100P / J / 50V	
C3036	ECJ1VF1E104Z	0.1 / Z / 25V	
C3037	ECJ1VF1E104Z	0.1 / Z / 25V	
C3038	ECJ1VF1E104Z	0.1 / Z / 25V	
C3039	ECJ1VF1E104Z	0.1 / Z / 25V	
C3040	ECJ1VF1E104Z	0.1 / Z / 25V	
C3041	ECUX1H101JCV	100P / J / 50V	
C3042	ECUX1H101JCV	100P / J / 50V	
C3043	ECUX1H101JCV	100P / J / 50V	
C3044	ECUX1H101JCV	100P / J / 50V	
C3045	ECUX1H101JCV	100P / J / 50V	
C3046	ECJ1VF1E104Z	0.1 / Z / 25V	
C3047	ECJ1VF1E104Z	0.1 / Z / 25V	
C3048	ECJ1VF1E104Z	0.1 / Z / 25V	
C3049	ECJ1VF1E104Z	0.1 / Z / 25V	
C3050	ECJ1VF1E104Z	0.1 / Z / 25V	
C3051	ECUX1H101JCV	100P / J / 50V	
C3052	ECUX1H101JCV	100P / J / 50V	
C3053	ECUX1H101JCV	100P / J / 50V	
C3054	ECUX1H101JCV	100P / J / 50V	
C3055	ECUX1H101JCV	100P / J / 50V	
C3056	ECJ1VF1E104Z	0.1 / Z / 25V	
C3057	ECJ1VF1E104Z	0.1 / Z / 25V	
C3058	ECJ1VF1E104Z	0.1 / Z / 25V	
C3059	ECJ1VF1E104Z	0.1 / Z / 25V	
C3060	ECJ1VF1E104Z	0.1 / Z / 25V	

Ref. No.	Part No.	Part Name & Description	Remarks
C3061	ECUX1H101JCV	100P / J / 50V	
C3062	ECUX1H101JCV	100P / J / 50V	
C3063	ECUX1H101JCV	100P / J / 50V	
C3064	ECUX1H101JCV	100P / J / 50V	
C3065	ECUX1H101JCV	100P / J / 50V	
C3066	ECJ1VF1E104Z	0.1 / Z / 25V	
C3067	ECJ1VF1E104Z	0.1 / Z / 25V	
C3068	ECJ1VF1E104Z	0.1 / Z / 25V	
C3069	ECJ1VF1E104Z	0.1 / Z / 25V	
C3070	ECJ1VF1E104Z	0.1 / Z / 25V	
C3071	ECUX1H101JCV	100P / J / 50V	
C3072	ECUX1H101JCV	100P / J / 50V	
C3073	ECUX1H101JCV	100P / J / 50V	
C3074	ECUX1H101JCV	100P / J / 50V	
C3075	ECUX1H101JCV	100P / J / 50V	
C3076	ECUX1H101JCV	100P / J / 50V	
C3077	ECJ1VF1E104Z	0.1 / Z / 25V	
C3078	ECUX1H101JCV	100P / J / 50V	
C3079	ECJ1VF1E104Z	0.1 / Z / 25V	
C3080	ECJ1VF1E104Z	0.1 / Z / 25V	
C3081	ECJ1VF1E104Z	0.1 / Z / 25V	
C3082	ECJ1VF1E104Z	0.1 / Z / 25V	
C3083	ECJ1VF1E104Z	0.1 / Z / 25V	
C3084	ECUX1H101JCV	100P / J / 50V	
C3085	ECJ1VF1E104Z	0.1 / Z / 25V	
C3086	ECUX1H101JCV	100P / J / 50V	
C3087	ECUX1H101JCV	100P / J / 50V	
C3088	ECJ1VF1E104Z	0.1 / Z / 25V	
C3089	ECUX1H101JCV	100P / J / 50V	
C3090	ECJ1VF1E104Z	0.1 / Z / 25V	
C3091	ECJ1VF1E104Z	0.1 / Z / 25V	
C3092	ECUX1H101JCV	100P / J / 50V	
C3093	ECJ1VF1E104Z	0.1 / Z / 25V	
C3094	ECUX1H101JCV	100P / J / 50V	
C3095	ECUX1H101JCV	100P / J / 50V	
C3096	ECJ1VF1E104Z	0.1 / Z / 25V	
C3097	ECUX1H101JCV	100P / J / 50V	
C3098	ECJ1VF1E104Z	0.1 / Z / 25V	
C3099	ECJ1VF1E104Z	0.1 / Z / 25V	
C3100	ECUX1H101JCV	100P / J / 50V	
C3101	ECJ1VF1E104Z	0.1 / Z / 25V	
C3102	ECUX1H101JCV	100P / J / 50V	
C3103	ECUX1H101JCV	100P / J / 50V	
C3104	ECJ1VF1E104Z	0.1 / Z / 25V	
C3105	ECJ1VF1E104Z	0.1 / Z / 25V	
C3106	ECJ1VF1E104Z	0.1 / Z / 25V	
C3107	ECUX1H101JCV	100P / J / 50V	
C3108	ECJ1VF1E104Z	0.1 / Z / 25V	
C3109	ECUX1H101JCV	100P / J / 50V	
C3110	ECJ1VF1E104Z	0.1 / Z / 25V	
C3111	F2G0G2210002	220 / M / 4V	
C3112	F2G0G2210002	220 / M / 4V	
C3113	ECJ1VF1E104Z	0.1 / Z / 25V	
C3114	ECUX1H101JCV	100P / J / 50V	
C3115	ECJ1VF1E104Z	0.1 / Z / 25V	
C3116	ECUX1H101JCV	100P / J / 50V	
C3117	ECUX1H101JCV	100P / J / 50V	
C3118	ECJ1VF1E104Z	0.1 / Z / 25V	
C3119	ECUX1H101JCV	100P / J / 50V	
C3120	ECUX1H101JCV	100P / J / 50V	
C3121	ECJ1VF1E104Z	0.1 / Z / 25V	
C3122	ECUX1H101JCV	100P / J / 50V	
C3123	ECUX1H101JCV	100P / J / 50V	
C3124	F2G0G2210002	220 / M / 4V	
C3125	ECJ1VF1E104Z	0.1 / Z / 25V	
C3126	ECUX1H101JCV	100P / J / 50V	
C3127	ECUX1H821JCV	820P / J / 50V	
C3128	ECUX1H101JCV	100P / J / 50V	
C3129	ECJ1VF1E104Z	0.1 / Z / 25V	
C3130	F2G0G2210002	220 / M / 4V	
C3131	ECJ1VF1E104Z	0.1 / Z / 25V	
C3132	ECUX1H101JCV	100P / J / 50V	
C3133	ECJ1VF1E104Z	0.1 / Z / 25V	

Ref. No.	Part No.	Part Name & Description	Remarks
C3134	ECUX1H101JCV	100P / J / 50V	
C3135	ECJ1VF1E104Z	0.1 / Z / 25V	
C3136	ECUX1H101JCV	100P / J / 50V	
C3137	ECJ1VF1E104Z	0.1 / Z / 25V	
C3138	ECJ1VF1E104Z	0.1 / Z / 25V	
C3139	ECJ1VF1E104Z	0.1 / Z / 25V	
C3140	ECUX1H101JCV	100P / J / 50V	
C3141	ECUX1H101JCV	100P / J / 50V	
C3142	ECUX1H101JCV	100P / J / 50V	
C3143	ECJ1VF1E104Z	0.1 / Z / 25V	
C3144	ECJ1VF1E104Z	0.1 / Z / 25V	
C3145	ECJ1VF1E104Z	0.1 / Z / 25V	
C3146	ECUX1H101JCV	100P / J / 50V	
C3147	ECUX1H101JCV	100P / J / 50V	
C3148	ECUX1H101JCV	100P / J / 50V	
C3149	ECJ1VF1E104Z	0.1 / Z / 25V	
C3150	ECJ1VF1E104Z	0.1 / Z / 25V	
C3151	ECJ1VF1E104Z	0.1 / Z / 25V	
C3152	ECUX1H101JCV	100P / J / 50V	
C3153	ECUX1H101JCV	100P / J / 50V	
C3154	ECUX1H101JCV	100P / J / 50V	
C3155	ECJ1VF1E104Z	0.1 / Z / 25V	
C3156	ECJ1VF1E104Z	0.1 / Z / 25V	
C3157	ECJ1VF1E104Z	0.1 / Z / 25V	
C3158	ECUX1H101JCV	100P / J / 50V	
C3159	ECUX1H101JCV	100P / J / 50V	
C3160	ECUX1H101JCV	100P / J / 50V	
C3161	ECJ1VF1E104Z	0.1 / Z / 25V	
C3162	ECJ1VF1E104Z	0.1 / Z / 25V	
C3163	ECUX1H101JCV	100P / J / 50V	
C3164	ECUX1H101JCV	100P / J / 50V	
C3165	ECJ1VF1E104Z	0.1 / Z / 25V	
C3166	ECJ1VF1E104Z	0.1 / Z / 25V	
C3167	ECUX1H101JCV	100P / J / 50V	
C3168	ECUX1H101JCV	100P / J / 50V	
C3169	ECJ1VF1E104Z	0.1 / Z / 25V	
C3170	ECUX1H101JCV	100P / J / 50V	
C3171	ECUX1H101JCV	100P / J / 50V	
C3172	ECUX1H101JCV	100P / J / 50V	
C3173	ECJ1VF1E104Z	0.1 / Z / 25V	
C3174	ECJ1VF1E104Z	0.1 / Z / 25V	
C3175	ECJ1VF1E104Z	0.1 / Z / 25V	
C3176	ECUX1H101JCV	100P / J / 50V	
C3177	ECUX1H101JCV	100P / J / 50V	
C3178	ECUX1H101JCV	100P / J / 50V	
C3179	ECJ1VF1E104Z	0.1 / Z / 25V	
C3180	ECJ1VF1E104Z	0.1 / Z / 25V	
C3181	ECUX1H101JCV	100P / J / 50V	
C3182	ECUX1H101JCV	100P / J / 50V	
C3183	ECJ1VF1E104Z	0.1 / Z / 25V	
C3184	ECJ1VF1E104Z	0.1 / Z / 25V	
C3185	ECJ1VF1E104Z	0.1 / Z / 25V	
C3186	ECUX1H101JCV	100P / J / 50V	
C3187	ECUX1H101JCV	100P / J / 50V	
C3188	ECUX1H101JCV	100P / J / 50V	
C3189	ECJ1VF1E104Z	0.1 / Z / 25V	
C3190	ECJ1VF1E104Z	0.1 / Z / 25V	
C3191	ECJ1VF1E104Z	0.1 / Z / 25V	
C3192	ECUX1H101JCV	100P / J / 50V	
C3193	ECJ1VF1E104Z	0.1 / Z / 25V	
C3194	ECJ1VF1E104Z	0.1 / Z / 25V	
C3195	ECJ1VF1E104Z	0.1 / Z / 25V	
C3196	ECUX1H101JCV	100P / J / 50V	
C3197	ECUX1H101JCV	100P / J / 50V	
C3198	ECUX1H101JCV	100P / J / 50V	
C3199	ECJ1VF1E104Z	0.1 / Z / 25V	
C3200	ECJ1VF1E104Z	0.1 / Z / 25V	
C3201	ECJ1VF1E104Z	0.1 / Z / 25V	
C3202	ECUX1H101JCV	100P / J / 50V	
C3203	ECUX1H101JCV	100P / J / 50V	
C3204	ECUX1H101JCV	100P / J / 50V	
C3205	ECUX1H101JCV	100P / J / 50V	
C3206	ECUX1H101JCV	100P / J / 50V	

Ref. No.	Part No.	Part Name & Description	Remarks
C3207	ECJ1VF1E104Z	0.1 / Z / 25V	
C3208	ECJ1VF1E104Z	0.1 / Z / 25V	
C3209	ECUX1H101JCV	100P / J / 50V	
C3210	ECUX1H101JCV	100P / J / 50V	
C3211	ECJ1VF1E104Z	0.1 / Z / 25V	
C3212	ECJ1VF1E104Z	0.1 / Z / 25V	
C3213	ECJ1VF1E104Z	0.1 / Z / 25V	
C3214	ECUX1H101JCV	100P / J / 50V	
C3215	ECUX1H101JCV	100P / J / 50V	
C3216	ECUX1H101JCV	100P / J / 50V	
C3217	ECJ1VF1E104Z	0.1 / Z / 25V	
C3218	ECJ1VF1E104Z	0.1 / Z / 25V	
C3219	ECJ1VF1E104Z	0.1 / Z / 25V	
C3220	ECUX1H101JCV	100P / J / 50V	
C3221	ECUX1H101JCV	100P / J / 50V	
C3222	ECUX1H101JCV	100P / J / 50V	
C3223	ECJ1VF1E104Z	0.1 / Z / 25V	
C3224	ECJ1VF1E104Z	0.1 / Z / 25V	
C3225	ECJ1VF1E104Z	0.1 / Z / 25V	
C3226	ECJ1VF1E104Z	0.1 / Z / 25V	
C3227	ECUX1H101JCV	100P / J / 50V	
C3228	ECUX1H101JCV	100P / J / 50V	
C3229	ECJ1VF1E104Z	0.1 / Z / 25V	
C3230	ECJ1VF1E104Z	0.1 / Z / 25V	
C3231	ECUX1H101JCV	100P / J / 50V	
C3232	ECUX1H101JCV	100P / J / 50V	
C3233	ECJ1VF1E104Z	0.1 / Z / 25V	
C3234	ECUX1H101JCV	100P / J / 50V	
C3235	ECUX1H101JCV	100P / J / 50V	
C3236	ECUX1H101JCV	100P / J / 50V	
C3237	ECJ1VF1E104Z	0.1 / Z / 25V	
C3238	ECJ1VF1E104Z	0.1 / Z / 25V	
C3239	ECJ1VF1E104Z	0.1 / Z / 25V	
C3240	ECUX1H101JCV	100P / J / 50V	
C3241	ECUX1H101JCV	100P / J / 50V	
C3242	ECUX1H101JCV	100P / J / 50V	
C3243	ECJ1VF1E104Z	0.1 / Z / 25V	
C3244	ECJ1VF1E104Z	0.1 / Z / 25V	
C3245	ECUX1H101JCV	100P / J / 50V	
C3246	ECUX1H101JCV	100P / J / 50V	
C3247	ECJ1VF1E104Z	0.1 / Z / 25V	
C3248	ECJ1VF1E104Z	0.1 / Z / 25V	
C3249	ECJ1VF1E104Z	0.1 / Z / 25V	
C3250	ECUX1H101JCV	100P / J / 50V	
C3251	ECUX1H101JCV	100P / J / 50V	
C3252	ECUX1H101JCV	100P / J / 50V	
C3253	ECJ1VF1E104Z	0.1 / Z / 25V	
C3254	ECJ1VF1E104Z	0.1 / Z / 25V	
C3255	ECJ1VF1E104Z	0.1 / Z / 25V	
C3256	ECUX1H101JCV	100P / J / 50V	
C3257	ECJ1VF1E104Z	0.1 / Z / 25V	
C3258	ECJ1VF1E104Z	0.1 / Z / 25V	
C3259	ECJ1VF1E104Z	0.1 / Z / 25V	
C3260	ECUX1H101JCV	100P / J / 50V	
C3261	ECUX1H101JCV	100P / J / 50V	
C3262	ECUX1H101JCV	100P / J / 50V	
C3263	ECJ1VF1E104Z	0.1 / Z / 25V	
C3264	ECJ1VF1E104Z	0.1 / Z / 25V	
C3265	ECJ1VF1E104Z	0.1 / Z / 25V	
C3266	ECUX1H101JCV	100P / J / 50V	
C3267	ECUX1H101JCV	100P / J / 50V	
C3268	ECUX1H101JCV	100P / J / 50V	
C3269	ECUX1H101JCV	100P / J / 50V	
C3270	ECUX1H101JCV	100P / J / 50V	
C3271	ECJ1VF1E104Z	0.1 / Z / 25V	
C3272	ECJ1VF1E104Z	0.1 / Z / 25V	
C3273	ECUX1H101JCV	100P / J / 50V	
C3274	ECUX1H101JCV	100P / J / 50V	
C3275	ECJ1VF1E104Z	0.1 / Z / 25V	
C3276	ECJ1VF1E104Z	0.1 / Z / 25V	
C3277	ECJ1VF1E104Z	0.1 / Z / 25V	
C3278	ECUX1H101JCV	100P / J / 50V	
C3279	ECUX1H101JCV	100P / J / 50V	

Ref. No.	Part No.	Part Name & Description	Remarks
C3280	ECUX1H101JCV	100P / J / 50V	
C3281	ECJ1VF1E104Z	0.1 / Z / 25V	
C3282	ECJ1VF1E104Z	0.1 / Z / 25V	
C3283	ECJ1VF1E104Z	0.1 / Z / 25V	
C3284	ECUX1H101JCV	100P / J / 50V	
C3285	ECUX1H101JCV	100P / J / 50V	
C3286	ECUX1H101JCV	100P / J / 50V	
C3287	ECJ1VF1E104Z	0.1 / Z / 25V	
C3288	ECJ1VF1E104Z	0.1 / Z / 25V	
C3289	F2G1A1010013	100 / M / 10V	
C3290	ECUX1H101JCV	100P / J / 50V	
C3291	ECJ1VF1E104Z	0.1 / Z / 25V	
C3292	ECUX1H101JCV	100P / J / 50V	
C3293	ECJ1VF1E104Z	0.1 / Z / 25V	
C3294	ECUX1H101JCV	100P / J / 50V	
C3295	ECJ1VF1E104Z	0.1 / Z / 25V	
C3296	ECUX1H101JCV	100P / J / 50V	
C3297	ECJ1VF1E104Z	0.1 / Z / 25V	
C3298	ECUX1H101JCV	100P / J / 50V	
C3299	ECJ1VF1E104Z	0.1 / Z / 25V	
C3300	ECUX1H101JCV	100P / J / 50V	
C3301	ECJ1VF1E104Z	0.1 / Z / 25V	
C3302	ECUX1H101JCV	100P / J / 50V	
C3303	ECUX1H101JCV	100P / J / 50V	
C3304	ECJ1VF1E104Z	0.1 / Z / 25V	
C3305	ECUX1H101JCV	100P / J / 50V	
C3306	ECJ1VF1E104Z	0.1 / Z / 25V	
C3307	F2G1A1010013	100 / M / 10V	
C3308	ECUX1H470JCV	47P / J / 50V	
C3309	ECUX1H470JCV	47P / J / 50V	
C3310	ECUX1H470JCV	47P / J / 50V	
C3312	ECUX1H470JCV	47P / J / 50V	
C3314	ECUX1H101JCV	100P / J / 50V	
C3315	ECUX1H101JCV	100P / J / 50V	
C3316	ECUX1H101JCV	100P / J / 50V	
C3318	ECUX1H101JCV	100P / J / 50V	
C3319	ECJ1VF1E104Z	0.1 / Z / 25V	
C3320	ECJ1VF1E104Z	0.1 / Z / 25V	
C3321	ECJ1VF1E104Z	0.1 / Z / 25V	
C3323	ECJ1VF1E104Z	0.1 / Z / 25V	
C3324	F2G1E4R70008	4.7 / M / 25V	
C3325	F2G1E4R70008	4.7 / M / 25V	
C3326	F2G1E4R70008	4.7 / M / 25V	
C3327	ECUV1H222KBV	2200P / K / 50V	
C3328	ECUX1C224ZV	0.22 / Z / 16V	
C3329	ECUX1H120JCV	12P / J / 50V	
C3330	ECUX1H101JCV	100P / J / 50V	
C3331	F2G1A1010013	100 / M / 10V	
C3332	ECJ1VF1E104Z	0.1 / Z / 25V	
C3333	ECUX1H102KBV	1000P / K / 50V	
C3334	ECJ1VF1E104Z	0.1 / Z / 25V	
C3335	ECJ1VF1E104Z	0.1 / Z / 25V	
C3336	ECUX1H101JCV	100P / J / 50V	
C3337	ECUX1H101JCV	100P / J / 50V	
C3338	ECUX1H101JCV	100P / J / 50V	
C3339	ECJ1VF1E104Z	0.1 / Z / 25V	
C3340	F2G1A1010013	100 / M / 10V	
C3341	ECUX1H101JCV	100P / J / 50V	
C3342	ECUX1H101JCV	100P / J / 50V	
C3343	ECJ1VF1E104Z	0.1 / Z / 25V	
C3344	ECUX1H101JCV	100P / J / 50V	
C3345	ECJ1VF1E104Z	0.1 / Z / 25V	
C3346	F2G1C1000014	100 / M / 16V	
C3347	ECUX1H101JCV	100P / J / 50V	
C3348	ECUX1H101JCV	100P / J / 50V	
C3349	ECJ1VF1E104Z	0.1 / Z / 25V	
C3350	ECJ1VF1E104Z	0.1 / Z / 25V	
C3351	ECJ1VF1E104Z	0.1 / Z / 25V	
C3353	ECUX1H681JCV	680P / J / 50V	
C3354	ECJ1VF1E104Z	0.1 / Z / 25V	
C3355	ECUX1H101JCV	100P / J / 50V	
C3356	F2G1C1000014	100 / M / 16V	
C3357	ECJ1VF1E104Z	0.1 / Z / 25V	

Ref. No.	Part No.	Part Name & Description	Remarks
C3358	ECUX1H101JCV	100P / J / 50V	
C3359	ECJ1VF1E104Z	0.1 / Z / 25V	
C3360	F2G1C1000014	100 / M / 16V	
C3361	ECUX1H101JCV	100P / J / 50V	
C3362	ECJ1VF1E104Z	0.1 / Z / 25V	
C3363	ECJ1VF1E104Z	0.1 / Z / 25V	
C3364	ECUX1H101JCV	100P / J / 50V	
C3365	ECUX1H102KBV	1000P / K / 50V	
C3366	ECJ1VF1E104Z	0.1 / Z / 25V	
C3367	ECJ1VF1E104Z	0.1 / Z / 25V	
C3368	ECUX1H102KBV	1000P / K / 50V	
C3369	ECJ1VF1E104Z	0.1 / Z / 25V	
C3370	ECJ1VF1E104Z	0.1 / Z / 25V	
C3371	ECUX1H102KBV	1000P / K / 50V	
C3372	ECJ1VF1E104Z	0.1 / Z / 25V	
C3373	ECUX1H101JCV	100P / J / 50V	
C3374	ECJ1VF1E104Z	0.1 / Z / 25V	
C3375	ECUX1H102KBV	1000P / K / 50V	
C3376	ECJ1VF1E104Z	0.1 / Z / 25V	
C3377	ECUX1H101JCV	100P / J / 50V	
C3378	ECJ1VF1E104Z	0.1 / Z / 25V	
C3379	ECJ1VF1E104Z	0.1 / Z / 25V	
C3380	ECUX1H101JCV	100P / J / 50V	
C3381	ECUX1H101JCV	100P / J / 50V	
C3382	ECJ1VF1E104Z	0.1 / Z / 25V	
C3383	ECUX1H101JCV	100P / J / 50V	
C3384	ECJ1VF1E104Z	0.1 / Z / 25V	
C3385	ECUX1H101JCV	100P / J / 50V	
C3386	ECJ1VF1E104Z	0.1 / Z / 25V	
C3387	ECUX1H101JCV	100P / J / 50V	
C3388	ECJ1VF1E104Z	0.1 / Z / 25V	
C3389	ECUX1H101JCV	100P / J / 50V	
C3390	ECUV1H150JCV	15P / J / 50V	
C3391	ECUV1H150JCV	15P / J / 50V	
C3392	ECJ1VB1C105K	1 / K / 16V	
C3393	ECUX1H101JCV	100P / J / 50V	
C3394	F1J1A106A024	106P / K / 10V	
C3395	ECUX1H101JCV	100P / J / 50V	
C3396	ECJ1VF1E104Z	0.1 / Z / 25V	
C3397	ECUX1H101JCV	100P / J / 50V	
C3398	ECJ1VF1E104Z	0.1 / Z / 25V	
C3399	ECUX1H101JCV	100P / J / 50V	
C3400	ECJ1VF1E104Z	0.1 / Z / 25V	
C3401	ECUX1H101JCV	100P / J / 50V	
C3402	ECJ1VF1E104Z	0.1 / Z / 25V	
C3403	F2G1C1000014	100 / M / 16V	
C3404	ECUX1H101JCV	100P / J / 50V	
C3405	ECJ1VF1E104Z	0.1 / Z / 25V	
C3406	ECUX1H101JCV	100P / J / 50V	
C3407	F2G0J4700012	47 / M / 6.3V	
C3408	ECJ1VF1E104Z	0.1 / Z / 25V	
C3409	ECJ1VF1E104Z	0.1 / Z / 25V	
C3410	ECUX1H101JCV	100P / J / 50V	
C3411	ECUX1H101JCV	100P / J / 50V	
C3412	ECJ1VF1E104Z	0.1 / Z / 25V	
C3413	ECUX1H101JCV	100P / J / 50V	
C3414	ECJ1VF1E104Z	0.1 / Z / 25V	
C3417	ECUX1H101JCV	100P / J / 50V	
C3418	ECJ1VF1E104Z	0.1 / Z / 25V	
C3419	ECJ1VF1E104Z	0.1 / Z / 25V	
C3420	ECJ1VF1E104Z	0.1 / Z / 25V	
C3421	ECUX1H101JCV	100P / J / 50V	
C3422	ECUX1H101JCV	100P / J / 50V	
C3423	ECJ1VF1E104Z	0.1 / Z / 25V	
C3424	ECUX1H101JCV	100P / J / 50V	
C3425	ECUX1H102KBV	1000P / K / 50V	
C3426	ECUX1H102KBV	1000P / K / 50V	
C3427	ECJ1VF1E104Z	0.1 / Z / 25V	
C3428	ECUX1H102KBV	1000P / K / 50V	
C3429	ECUX1H102KBV	1000P / K / 50V	
C3430	ECJ1VF1E104Z	0.1 / Z / 25V	
C3431	ECJ1VF1E104Z	0.1 / Z / 25V	
C3432	ECUX1H101JCV	100P / J / 50V	

Ref. No.	Part No.	Part Name & Description	Remarks
C3433	ECUX1H101JCV	100P / J / 50V	
C3436	ECUX1H101JCV	100P / J / 50V	
C3437	ECJ1VF1E104Z	0.1 / Z / 25V	
C3438	ECUX1H101JCV	100P / J / 50V	
C3439	ECJ1VF1E104Z	0.1 / Z / 25V	
C3440	F2G1E4R70008	4.7 / M / 25V	
C3441	F2G1E4R70008	4.7 / M / 25V	
C3442	F2G1E4R70008	4.7 / M / 25V	
C3443	ECUX1H470JCV	47P / J / 50V	
C3444	ECUX1H470JCV	47P / J / 50V	
C3446	ECJ1VF1E104Z	0.1 / Z / 25V	
C3447	ECJ1VF1E104Z	0.1 / Z / 25V	
C3448	ECJ1VB1C105K	1 / K / 16V	
COILS			
L3000	J0JCC0000059	Inductor Coil	
L3001	J0JCC0000059	Inductor Coil	
L3002	J0JCC0000059	Inductor Coil	
L3003	J0JCC0000059	Inductor Coil	
L3004	J0JCC0000059	Inductor Coil	
L3005	J0JCC0000059	Inductor Coil	
L3006	J0JCC0000059	Inductor Coil	
L3007	J0JCC0000059	Inductor Coil	
L3008	J0JCC0000059	Inductor Coil	
L3009	J0JCC0000059	Inductor Coil	
L3010	J0JCC0000059	Inductor Coil	
L3011	J0JCC0000059	Inductor Coil	
L3012	J0JCC0000059	Inductor Coil	
L3013	J0JCC0000059	Inductor Coil	
L3014	J0JCC0000059	Inductor Coil	
L3015	J0JCC0000059	Inductor Coil	
L3016	J0JCC0000059	Inductor Coil	
L3017	J0JCC0000059	Inductor Coil	
L3018	J0JCC0000059	Inductor Coil	
L3019	J0JCC0000059	Inductor Coil	
L3020	J0JCC0000059	Inductor Coil	
L3021	J0JCC0000059	Inductor Coil	
L3022	J0JCC0000059	Inductor Coil	
L3023	J0JCC0000059	Inductor Coil	
L3024	J0JCC0000059	Inductor Coil	
L3025	J0JCC0000059	Inductor Coil	
L3026	J0JCC0000059	Inductor Coil	
L3027	J0JCC0000059	Inductor Coil	
L3028	J0JCC0000059	Inductor Coil	
L3029	J0JCC0000059	Inductor Coil	
L3030	J0JCC0000059	Inductor Coil	
L3031	J0JCC0000059	Inductor Coil	
L3032	J0JCC0000059	Inductor Coil	
L3033	J0JCC0000059	Inductor Coil	
L3034	J0JCC0000059	Inductor Coil	
L3035	J0JCC0000059	Inductor Coil	
L3036	J0JCC0000059	Inductor Coil	
L3037	J0JCC0000059	Inductor Coil	
L3038	J0JCC0000059	Inductor Coil	
L3039	J0JCC0000059	Inductor Coil	
L3040	J0JCC0000059	Inductor Coil	
L3042	J0JCC0000059	Inductor Coil	
L3043	J0JCC0000059	Inductor Coil	
L3045	J0JCC0000059	Inductor Coil	
L3046	J0JCC0000059	Inductor Coil	
L3047	J0JCC0000059	Inductor Coil	
L3048	J0JCC0000059	Inductor Coil	
L3049	J0JCC0000059	Inductor Coil	
L3050	J0JCC0000059	Inductor Coil	
L3051	J0JCC0000059	Inductor Coil	
L3052	J0JCC0000059	Inductor Coil	
L3053	J0JCC0000059	Inductor Coil	
L3054	J0JCC0000059	Inductor Coil	
L3055	J0JCC0000059	Inductor Coil	
L3056	J0JCC0000059	Inductor Coil	
L3057	J0JCC0000059	Inductor Coil	
L3058	J0JCC0000059	Inductor Coil	
L3061	J0JCC0000059	Inductor Coil	
L3062	G1C220KA0057	Coil	

Ref. No.	Part No.	Part Name & Description	Remarks
L3063	J0JCC0000059	Inductor Coil	
DIODES			
D3000	B0JCAE000001	Diode	
D3001	B0JCPE000003	Diode	
D3002	B3AAB0000085	LED	
D3003	B3AAB0000085	LED	
D3004	B3AAB0000085	LED	
D3005	B3AAB0000085	LED	
D3006	B0JCAE000001	Diode	
D3007	B0JCAE000001	Diode	
TRANSISTORS			
Q3000	PJVIDTC114EK	Transistor	
Q3001	PJVIDTC114EK	Transistor	
Q3002	PJVIDTC114EK	Transistor	
Q3003	PJVIDTC114EK	Transistor	
Q3004	B1DHGD000024	Transistor	
Q3005	B1GBCFLL0002	Transistor	
Q3006	B1GBCFLL0002	Transistor	
Q3007	B1GBCFLL0002	Transistor	
Q3008	B1GBCFLL0002	Transistor	
ICs			
IC3000	C1ZBZ0002423	IC	
IC3001	C0CBAAG00024	IC Regulator	
IC3003	C0CBAAG00022	IC Regulator	
IC3004	C0CBAAG00022	IC Regulator	
IC3005	C3ABRG000046	DRAM for KV-S3105C Series	
IC3005	C3ABQG000072	DRAM for KV-S3085 Series	
IC3006	C3ABRG000046	DRAM for KV-S3105C Series	
IC3006	C3ABQG000072	DRAM for KV-S3085 Series	
IC3007	C3ABRG000046	DRAM for KV-S3105C Series	
IC3007	C3ABQG000072	DRAM for KV-S3085 Series	
IC3008	C3ABRG000046	DRAM for KV-S3105C Series	
IC3008	C3ABQG000072	DRAM for KV-S3085 Series	
IC3009	C3ABRG000046	DRAM for KV-S3105C Series	
IC3010	C3ABRG000046	DRAM for KV-S3105C Series	
IC3011	C3ABRG000046	DRAM for KV-S3105C Series	
IC3012	C3ABRG000046	DRAM for KV-S3105C Series	
IC3014	H1Z4005B0015	Crystal Oscillator	
IC3015	H1Z1046B0001	Crystal Oscillator	
IC3017	H1Z9495B0001	Crystal Oscillator	
IC3019	C0ZBZ0000950	IC	
IC3020	C1DB00001343	IC	
IC3021	C1DB00001343	IC	
IC3022	C1DB00001343	IC	
IC3023	C1DB00001137	IC	
IC3025	C0JBAZ001411	IC CMOS Logic	
IC3026	C0JBAZ001411	IC CMOS Logic	
IC3027	C1DB00001183	IC	
IC3028	C0CBABG00032	IC Regulator	
IC3029	C2CBYK000003	IC 16Bit CPU	
IC3030	PJWI08071M	IC Flash Memory	
IC3031	C3BBHG000091	SRAM	
OTEHRS			
X3000	H0J240500020	Crystal Resonator	
X3002	H2D165500002	Oscillator	
CN3000	K1KAC0BA0054	Connector	
CN3001	K1MMG8A00006	Connector	
CN3003	K1FB168B0017	Connector	
CN3005	K1FA104B0028	Connector	
CN3006	K1KA10A00325	Connector	
CN3007	K1KA34A00097	Connector	
CN3008	K1KA06A00408	Connector	
SP1	K1NC02Z00009	Connector	

15.3. MOTHER Board

Ref. No.	Part No.	Part Name & Description	Remarks
RESISTORS			
R2001	D4FB1R100008	Poly Switch	
R2002	D4FB1R100008	Poly Switch	
R2005	ERJ3GEYJ470	47 / J / (1/10W)	
R2006	ERJ3GEYJ470	47 / J / (1/10W)	

Ref. No.	Part No.	Part Name & Description	Remarks
R2007	ERJ3GEYJ101	100 / J / (1/10W)	
R2008	ERJ3GEYJ103	10K / J / (1/10W)	
R2009	ERJ3GEYJ222	2.2K / J / (1/10W)	
R2010	ERJ3GEYJ101	100 / J / (1/10W)	
R2011	ERJ3GEYJ223	22K / J / (1/10W)	
R2013	ERJ3GEYJ103	10K / J / (1/10W)	
R2016	ERJ3GEYJ222	2.2K / J / (1/10W)	
R2017	ERJ3GEYJ223	22K / J / (1/10W)	
R2018	D4FB1R100008	Poly Switch	
R2020	ERJ3GEYJ103	10K / J / (1/10W)	
R2021	ERJ3GEYJ103	10K / J / (1/10W)	
R2022	ERJ3GEYJ103	10K / J / (1/10W)	
R2023	ERJ3GEYJ103	10K / J / (1/10W)	
R2024	ERJ3GEYJ220	22 / J / (1/10W)	
R2025	ERJ3GEYJ220	22 / J / (1/10W)	
R2026	ERJ3GEYJ103	10K / J / (1/10W)	
R2027	ERJ3GEYJ220	22 / J / (1/10W)	
R2028	ERJ3GEYJ220	22 / J / (1/10W)	
R2029	ERJ3GEYJ220	22 / J / (1/10W)	
R2030	ERJ3GEYJ220	22 / J / (1/10W)	
R2031	ERJ3GEYJ220	22 / J / (1/10W)	
R2033	D4FBR300A005	Poly Switch	
R2036	D4FAR100A003	Poly Switch	
R2039	ERJ3GEYJ220	22 / J / (1/10W)	
R2040	ERJ3GEYJ472	4.7K / J / (1/10W)	
R2041	ERJ3GEYJ472	4.7K / J / (1/10W)	
R2042	ERJ3GEYJ472	4.7K / J / (1/10W)	
R2043	ERJ3GEYJ472	4.7K / J / (1/10W)	
R2044	ERJ3GEYJ472	4.7K / J / (1/10W)	
R2045	ERJ3GEYJ472	4.7K / J / (1/10W)	
R2046	ERJ3GEYJ472	4.7K / J / (1/10W)	
R2047	ERJ3GEYJ472	4.7K / J / (1/10W)	
R2048	ERJ3GEYJ472	4.7K / J / (1/10W)	
R2049	ERJ3GEYJ472	4.7K / J / (1/10W)	
R2050	ERJ3GEYJ472	4.7K / J / (1/10W)	
R2051	ERJ3GEYJ472	4.7K / J / (1/10W)	
R2056	ERJ3GEY0R00	0-ohm Jumper	
R2058	ERJ3GEYJ103	10K / J / (1/10W)	
R2059	ERJ3GEYJ223	22K / J / (1/10W)	
R2061	ERJ3GEYJ222	2.2K / J / (1/10W)	
Z2001	MNR14E0AJ220	Resistor Array	
Z2002	MNR14E0AJ220	Resistor Array	
Z2003	MNR14E0AJ101	Resistor Array	
Z2004	D1H810440001	Resistor Array	
Z2005	MNR14E0AJ103	Resistor Array	
Z2006	MNR14E0AJ103	Resistor Array	
Z2007	MNR14E0AJ103	Resistor Array	
Z2008	MNR14E0AJ103	Resistor Array	
Z2009	MNR14E0AJ103	Resistor Array	
Z2010	MNR14E0AJ103	Resistor Array	
Z2011	MNR14E0AJ103	Resistor Array	
Z2012	MNR14E0AJ103	Resistor Array	
Z2013	MNR14E0AJ220	Resistor Array	
Z2014	MNR14E0AJ220	Resistor Array	
Z2015	MNR14E0AJ220	Resistor Array	
Z2016	MNR14E0AJ220	Resistor Array	
Z2017	MNR14E0AJ220	Resistor Array	
Z2018	MNR14E0AJ220	Resistor Array	
Z2019	MNR14E0AJ220	Resistor Array	
Z2020	MNR14E0AJ220	Resistor Array	
Z2021	MNR14E0AJ103	Resistor Array	
Z2022	MNR14E0AJ103	Resistor Array	
Z2023	MNR14E0AJ103	Resistor Array	
Z2024	MNR14E0AJ103	Resistor Array	
Z2025	MNR14E0AJ220	Resistor Array	
Z2026	MNR14E0AJ220	Resistor Array	
Z2027	MNR14E0AJ103	Resistor Array	
Z2028	MNR14E0AJ103	Resistor Array	
Z2029	MNR14E0AJ103	Resistor Array	
Z2030	MNR14E0AJ103	Resistor Array	
Z2031	MNR14E0AJ103	Resistor Array	
Z2032	MNR14E0AJ103	Resistor Array	
Z2033	MNR14E0AJ103	Resistor Array	

Ref. No.	Part No.	Part Name & Description	Remarks
Z2034	MNR14E0AJ103	Resistor Array	
Z2035	MNR14E0AJ103	Resistor Array	
Z2036	MNR14E0AJ103	Resistor Array	
Z2037	MNR14E0AJ220	Resistor Array	
Z2038	MNR14E0AJ220	Resistor Array	
Z2039	MNR14E0AJ220	Resistor Array	
Z2040	MNR14E0AJ220	Resistor Array	
Z2041	MNR14E0AJ220	Resistor Array	
Z2042	MNR14E0AJ220	Resistor Array	
Z2043	MNR14E0AJ220	Resistor Array	
Z2044	MNR14E0AJ220	Resistor Array	
Z2045	MNR14E0AJ220	Resistor Array	
Z2046	MNR14E0AJ220	Resistor Array	
Z2047	MNR14E0AJ103	Resistor Array	
Z2048	MNR14E0AJ103	Resistor Array	
Z2049	MNR14E0AJ220	Resistor Array	
Z2050	MNR14E0AJ220	Resistor Array	
Z2051	MNR14E0AJ220	Resistor Array	
Z2052	MNR14E0AJ220	Resistor Array	
Z2053	MNR14E0AJ220	Resistor Array	
Z2054	MNR14E0AJ220	Resistor Array	
Z2055	MNR14E0AJ220	Resistor Array	
Z2056	MNR14E0AJ220	Resistor Array	
Z2057	MNR14E0AJ220	Resistor Array	
Z2058	MNR14E0AJ220	Resistor Array	
Z2059	MNR14E0AJ103	Resistor Array	
Z2060	MNR14E0AJ103	Resistor Array	
Z2061	MNR14E0AJ103	Resistor Array	
Z2062	MNR14E0AJ103	Resistor Array	
Z2063	D1H810440001	Resistor Array	
Z2064	MNR14E0AJ220	Resistor Array	
Z2066	D1H810440001	Resistor Array	
Z2067	MNR14E0AJ220	Resistor Array	
Z2068	MNR14E0AJ220	Resistor Array	
CAPACITORS			
C2001	ECJ1VF1E104Z	0.1 / Z / 25V	
C2002	ECJ1VF1E104Z	0.1 / Z / 25V	
C2003	ECJ1VF1E104Z	0.1 / Z / 25V	
C2004	ECJ1VF1E104Z	0.1 / Z / 25V	
C2005	ECJ1VF1E104Z	0.1 / Z / 25V	
C2006	ECUX1H102KBV	1000P / K / 50V	
C2007	ECUX1H102KBV	1000P / K / 50V	
C2008	ECUX1H102KBV	1000P / K / 50V	
C2009	ECUX1H101JCV	100P / J / 50V	
C2010	ECUX1H101JCV	100P / J / 50V	
C2011	ECUX1H101JCV	100P / J / 50V	
C2012	ECJ1VF1E104Z	0.1 / Z / 25V	
C2013	ECJ1VF1E104Z	0.1 / Z / 25V	
C2015	F2G1C1010024	100 / M / 16V	
C2016	ECJ1VF1E104Z	0.1 / Z / 25V	
C2017	F2G1C1010024	100 / M / 16V	
C2018	ECJ1VF1E104Z	0.1 / Z / 25V	
C2019	ECJ1VF1E104Z	0.1 / Z / 25V	
C2020	ECUX1H102KBV	1000P / K / 50V	
C2021	ECUX1H102KBV	1000P / K / 50V	
C2022	ECUX1H101JCV	100P / J / 50V	
C2023	ECUX1H101JCV	100P / J / 50V	
C2024	ECJ1VF1E104Z	0.1 / Z / 25V	
C2025	ECUX1H102KBV	1000P / K / 50V	
C2026	ECUX1H101JCV	100P / J / 50V	
C2027	ECJ1VF1E104Z	0.1 / Z / 25V	
C2028	ECJ1VF1E104Z	0.1 / Z / 25V	
C2029	ECUX1H102KBV	1000P / K / 50V	
C2030	ECUX1H102KBV	1000P / K / 50V	
C2031	ECUX1H220JCV	22P / J / 50V	
C2032	ECUX1H220JCV	22P / J / 50V	
C2033	ECUX1H470JCV	47P / J / 50V	
C2034	ECUX1H101JCV	100P / J / 50V	
C2035	ECUX1H470JCV	47P / J / 50V	
C2036	ECUX1H470JCV	47P / J / 50V	
C2037	ECUX1H101JCV	100P / J / 50V	
C2038	ECUX1H470JCV	47P / J / 50V	
C2039	ECUX1H470JCV	47P / J / 50V	

Ref. No.	Part No.	Part Name & Description	Remarks
C2040	ECUX1H470JCV	47P / J / 50V	
C2041	ECUX1H470JCV	47P / J / 50V	
C2042	ECUX1H470JCV	47P / J / 50V	
C2043	ECJ1VF1E104Z	0.1 / Z / 25V	
C2044	ECJ1VF1E104Z	0.1 / Z / 25V	
C2045	ECJ1VF1E104Z	0.1 / Z / 25V	
C2046	ECJ1VF1E104Z	0.1 / Z / 25V	
C2047	ECUX1H101JCV	100P / J / 50V	
C2048	ECUX1H101JCV	100P / J / 50V	
C2049	ECUX1H101JCV	100P / J / 50V	
C2050	ECUX1H101JCV	100P / J / 50V	
C2064	ECUX1H102KBV	1000P / K / 50V	
C2065	ECJ1VF1E104Z	0.1 / Z / 25V	
C2066	ECUX1H101JCV	100P / J / 50V	
C2075	F2G1C1010024	100 / M / 16V	
C2076	F2G1A1010013	100 / M / 10V	
C2077	F2G1C1010024	100 / M / 16V	
C2079	F2G1V1010011	100 / M / 35V	
C2080	F2G1A1010013	100 / M / 10V	
C2083	EZASCE101M	Capacitor Array	
C2087	EZASCE101M	Capacitor Array	
C2092	ECJ1VF1E104Z	0.1 / Z / 25V	
C2093	ECJ1VF1E104Z	0.1 / Z / 25V	
C2094	ECJ1VF1E104Z	0.1 / Z / 25V	
C2095	ECJ1VF1E104Z	0.1 / Z / 25V	
C2096	ECJ1VF1E104Z	0.1 / Z / 25V	
C2097	ECJ1VF1E104Z	0.1 / Z / 25V	
C2098	ECJ1VF1E104Z	0.1 / Z / 25V	
C2100	ECJ1VF1E104Z	0.1 / Z / 25V	
C2102	ECJ1VF1E104Z	0.1 / Z / 25V	
C2103	ECJ1VF1E104Z	0.1 / Z / 25V	
C2104	ECJ1VF1E104Z	0.1 / Z / 25V	
C2105	ECJ1VF1E104Z	0.1 / Z / 25V	
C2106	ECJ1VF1E104Z	0.1 / Z / 25V	
C2107	ECUX1H102KBV	1000P / K / 50V	
C2108	ECUX1H102KBV	1000P / K / 50V	
C2109	ECUX1H102KBV	1000P / K / 50V	
C2110	ECUX1H102KBV	1000P / K / 50V	
C2111	ECUX1H102KBV	1000P / K / 50V	
C2112	ECJ1VF1E104Z	0.1 / Z / 25V	
C2113	ECJ1VF1E104Z	0.1 / Z / 25V	
C2114	ECJ1VF1E104Z	0.1 / Z / 25V	
C2115	ECJ1VF1E104Z	0.1 / Z / 25V	
C2116	ECJ1VF1E104Z	0.1 / Z / 25V	
C2117	ECJ1VF1E104Z	0.1 / Z / 25V	
C2118	ECUX1H102KBV	1000P / K / 50V	
C2119	ECUX1H101JCV	100P / J / 50V	
C2120	ECJ1VF1E104Z	0.1 / Z / 25V	
C2121	ECUX1H101JCV	100P / J / 50V	
C2122	ECJ1VF1E104Z	0.1 / Z / 25V	
C2123	ECUX1H101JCV	100P / J / 50V	
C2124	ECJ1VF1E104Z	0.1 / Z / 25V	
C2125	ECUX1H102KBV	1000P / K / 50V	
C2126	ECUX1H101JCV	100P / J / 50V	
C2127	ECJ1VF1E104Z	0.1 / Z / 25V	
C2128	ECUX1H102KBV	1000P / K / 50V	
C2129	ECUX1H101JCV	100P / J / 50V	
C2130	ECUX1H101JCV	100P / J / 50V	
C2131	ECUX1H101JCV	100P / J / 50V	
C2132	ECJ1VF1E104Z	0.1 / Z / 25V	
C2133	F2G1A1010013	100 / M / 10V	
C2134	ECJ1VF1E104Z	0.1 / Z / 25V	
C2135	F2G1A1010013	100 / M / 10V	
C2136	ECJ1VF1E104Z	0.1 / Z / 25V	
C2137	ECJ1VF1E104Z	0.1 / Z / 25V	
COILS			
L2005	G1C220KA0057	Coil	
L2006	G1C220KA0057	Coil	
DIODES			
D2001	B0JCAE000001	Diode	
D2003	B0JCAE000001	Diode	
TRANSISTORS			
Q2007	B1GBCFL0002	Transistor	

Ref. No.	Part No.	Part Name & Description	Remarks
Q2008	B1DHCB000031	Transistor	
Q2009	B1DHCB000031	Transistor	
Q2010	B1GBCFLL0002	Transistor	
Q2011	B1GBCFLL0002	Transistor	
Q2012	B1GBCFLL0002	Transistor	
Q2016	B1GBCFEH0001	Transistor	
Q2019	B1DHCB000031	Transistor	
Q2020	B1GDCFLL0010	Transistor	
ICs			
IC2001	C0JBZA001411	IC CMOS Logic	
IC2002	AN79L10M	IC	
IC2003	C0CBAKE00009	IC Regulator	
IC2004	C0JBZA002075	IC	
IC2005	C0JBZA002075	IC	
IC2006	C0JBZA001411	IC CMOS Logic	
IC2007	C0JBZA001411	IC CMOS Logic	
IC2008	C0JBZA001411	IC CMOS Logic	
IC2009	C0JBZA001411	IC CMOS Logic	
IC2010	SN74LV02ANS2	IC	
IC2011	C0JBAN000168	IC	
IC2012	C0JBAN000168	IC	
IC2013	C0JBAN000168	IC	
IC2014	C0JBZA002075	IC	
IC2015	SN74LV00ANS2	IC	
IC2016	C0JBZA002075	IC	
IC2018	C0JBAN000168	IC	
IC2019	C0JBZA001411	IC CMOS Logic	
IC2020	C0JBZA002075	IC	
IC2021	C0JBZA002075	IC	
IC2022	C0JBZA002075	IC	
IC2023	C0JBZA001411	IC CMOS Logic	
IC2024	C0JBZA001411	IC CMOS Logic	
IC2025	C0JBFA000356	IC	
IC2026	C0JBFA000356	IC	
IC2027	C0JBFA000356	IC	
IC2028	C0JBFA000356	IC	
IC2029	C0JBFA000356	IC	
IC2030	C0JBZA001411	IC CMOS Logic	
OTHERS			
CN2001	K1KBJ0AA0022	Connector	
CN2002	K1KA08A00446	Connector	
CN2004	K1KA15A00149	Connector	
CN2005	K1KA14A00251	Connector	
CN2007	K1KBC0AA0022	Connector	
CN2008	K1KBC0AA0022	Connector	
CN2009	K1KA06A00430	Connector	
CN2010	K1KA12AA0018	Connector	
CN2011	K1KA18A00090	Connector	
CN2012	K1KA07A00262	Connector	
CN2013	K1KA06A00409	Connector	
CN2014	K1KA34A00105	Connector	
CN2015	K1KA14AA0020	Connector	
CN2016	K1KA02AA0054	Connector	
CN2018	K1KA03AA0054	Connector	
CN2019	K1KA08A00443	Connector	
CN2020	K1KA07AA0197	Connector	
CN2025	K1KA24A00094	Connector	
CN2026	K1KA10A00413	Connector	
CN2027	K1KA09A00215	Connector	

15.4. DRIVE Board

Ref. No.	Part No.	Part Name & Description	Remarks
RESISTORS			
R4000	ERDS2TJ220	22 / J / (1/4W)	
R4001	ERDS2TJ220	22 / J / (1/4W)	
R4002	ERDS2TJ392	3.9K / J / (1/4W)	
R4003	ERDS2TJ222	2.2K / J / (1/4W)	
R4004	ERDS2TJ392	3.9K / J / (1/4W)	
R4005	ERDS2TJ222	2.2K / J / (1/4W)	
R4009	ERDS2TJ392	3.9K / J / (1/4W)	
R4010	ERDS2TJ222	2.2K / J / (1/4W)	

Ref. No.	Part No.	Part Name & Description	Remarks
R4011	ERDS2TJ101	100 / J / (1/4W)	
R4012	ERDS2TJ101	100 / J / (1/4W)	
R4013	ERDS2TJ121	120 / J / (1/4W)	
R4014	ERDS2TJ121	120 / J / (1/4W)	
R4015	ERDS2TJ562	5.6K / J / (1/4W)	
R4016	ERDS2TJ823	82K / J / (1/4W)	
R4017	ERDS2TJ102	1K / J / (1/4W)	
R4018	ERDS2TJ222	2.2K / J / (1/4W)	
R4019	ERDS2TJ220	22 / J / (1/4W)	
R4020	ERDS2TJ220	22 / J / (1/4W)	
R4021	ERDS2TJ220	22 / J / (1/4W)	
R4022	ERDS2TJ220	22 / J / (1/4W)	
R4023	ERDS2TJ220	22 / J / (1/4W)	
R4024	ERDS2TJ220	22 / J / (1/4W)	
R4025	ERDS2TJ220	22 / J / (1/4W)	
R4026	ERDS2TJ220	22 / J / (1/4W)	
R4027	ERDS2TJ220	22 / J / (1/4W)	
R4028	ERDS2TJ220	22 / J / (1/4W)	
R4029	ERDS2TJ220	22 / J / (1/4W)	
R4030	ERDS2TJ220	22 / J / (1/4W)	
R4031	ERDS2TJ220	22 / J / (1/4W)	
R4039	ERDS2TJ102	1K / J / (1/4W)	
R4041	ERDS2TJ562	5.6K / J / (1/4W)	
R4042	ERDS2TJ152	1.5K / J / (1/4W)	
R4043	ERDS2TJ152	1.5K / J / (1/4W)	
R4044	ERDS2TJ222	2.2K / J / (1/4W)	
R4045	ERDS2TJ222	2.2K / J / (1/4W)	
R4046	ERDS2TJ562	5.6K / J / (1/4W)	
R4047	ERDS2TJ222	2.2K / J / (1/4W)	
R4048	ERDS2TJ222	2.2K / J / (1/4W)	
R4049	ERDS2TJ103	10K / J / (1/4W)	
R4050	ERDS2TJ103	10K / J / (1/4W)	
R4059	ERDS2TJ103	10K / J / (1/4W)	
R4060	ERDS2TJ102	1K / J / (1/4W)	
R4061	ERDS2TJ102	1K / J / (1/4W)	
R4062	ERDS2TJ222	2.2K / J / (1/4W)	
R4063	ERDS2TJ220	22 / J / (1/4W)	
R4064	ERDS2TJ220	22 / J / (1/4W)	
Z4000	D4FAR650A003	Poly Switch	
Z4002	D4FA1R85A003	Poly Switch	
Z4003	D4FA1R85A003	Poly Switch	
Z4004	D4FA1R10A003	Poly Switch	
Z4005	D4FAR650A003	Poly Switch	
Z4006	D4FAR200A004	Poly Switch	
CAPACITORS			
C4000	EEUFC1V471	470 / M / 10V	
C4001	F1E1H1040017	0.1 / Z / 50V	
C4002	F2A1V2210035	220 / M / 35V	
C4003	F1E1H1040017	0.1 / Z / 50V	
C4004	EEUFC1V471	470 / M / 10V	
C4005	EEUFC1V471	470 / M / 10V	
C4006	F2A1V2210035	220 / M / 35V	
C4009	F2A1H3300020	33 / M / 50V	
C4010	F2A1H3300020	33 / M / 50V	
C4012	F1E1H1040017	0.1 / Z / 50V	
C4013	F1E1H1040017	0.1 / Z / 50V	
C4014	F2A1H3300020	33 / M / 50V	
C4015	F1E1H1040017	0.1 / Z / 50V	
C4022	F1E1H471A141	470P / K / 50V	
C4025	F1E1H471A141	470P / K / 50V	
C4028	F1E1H471A141	470P / K / 50V	
C4037	F1E1H1040017	0.1 / Z / 50V	
C4038	F1E1H1040017	0.1 / Z / 50V	
C4041	F2A1V2210035	220 / M / 35V	
C4042	F1E1H471A141	470P / K / 50V	
DIODES			
D4000	B0BA017A0035	Diode	
D4001	B0BA017A0035	Diode	
D4002	B0BA017A0035	Diode	
D4004	ERA91-02	Diode	
D4005	ERA91-02	Diode	
TRANSISTORS			
Q4000	2SC3311A	Transistor	

Ref. No.	Part No.	Part Name & Description	Remarks
Q4001	2SC3311A	Transistor	
Q4002	2SC3311A	Transistor	
Q4003	UN4213	Transistor	
Q4004	UN4221	Transistor	
Q4006	UN4221	Transistor	
Q4007	B1DGGG000017	Transistor	
Q4008	B1CGRF000003	Transistor	
Q4009	UN4213	Transistor	
Q4010	UN4213	Transistor	
Q4011	2SC3311A	Transistor	
Q4012	2SC3311A	Transistor	
Q4013	UN4213	Transistor	
ICs			
IC4000	C0GAN0000031	IC	
IC4001	C0GAN0000031	IC	
IC4002	C0GAL0000013	IC	
IC4003	C0JAAF000142	IC	
IC4004	C0JAAF000142	IC	
OTHER			
CN4000	K1KAC0BA0054	Connector	

15.5. LCD Board

Ref. No.	Part No.	Part Name & Description	Remarks
IC			
IC7000	L5DZAJC00001	LCD	
OTHERS			
CN7001	K1KB14AA0099	Connector	
CN7002	K1KB14AA0099	Connector	

15.6. PANEL Board

Ref. No.	Part No.	Part Name & Description	Remarks
RESISTORS			
R6000	ERDS2TJ102	1K / J / (1/4W)	
R6001	ERDS2TJ102	1K / J / (1/4W)	
R6002	ERDS2TJ102	1K / J / (1/4W)	
R6003	ERDS2TJ102	1K / J / (1/4W)	
R6004	ERDS2TJ102	1K / J / (1/4W)	
R6005	ERDS2TJ102	1K / J / (1/4W)	
R6006	ERDS2TJ102	1K / J / (1/4W)	
R6007	ERDS2TJ102	1K / J / (1/4W)	
R6008	ERDS2TJ102	1K / J / (1/4W)	
R6009	ERDS2TJ102	1K / J / (1/4W)	
R6010	ERDS2TJ102	1K / J / (1/4W)	
R6011	ERDS2TJ102	1K / J / (1/4W)	
R6012	ERDS2TJ102	1K / J / (1/4W)	
R6013	ERDS2TJ102	1K / J / (1/4W)	
R6014	ERDS2TJ102	1K / J / (1/4W)	
R6015	ERDS2TJ102	1K / J / (1/4W)	
R6018	ERDS2TJ222	2.2K / J / (1/4W)	
R6019	ERDS2TJ332	3.3K / J / (1/4W)	
R6020	ERDS2TJ331	330 / J / (1/4W)	
R6021	ERDS2TJ681	680 / J / (1/4W)	
R6022	ERDS2TJ222	2.2K / J / (1/4W)	
R6023	ERDS2TJ103	10K / J / (1/4W)	
R6103	ERDS2TJ681	680 / J / (1/4W)	
R6104	ERDS2TJ103	10K / J / (1/4W)	
Z6000	RGLE8X103J	Resistor Array	
Z6001	RGLE8X103J	Resistor Array	
Z6002	RGLE8X103J	Resistor Array	
CAPACITORS			
C6000	F1E1H1040017	0.1 / Z / 50V	
C6001	F1E1H1040017	0.1 / Z / 50V	
C6002	F1E1H1040017	0.1 / Z / 50V	
C6003	F1E1H1040017	0.1 / Z / 50V	
C6029	ECEA1AKS101	100 / M / 10V	
C6030	ECEA1AKS101	100 / M / 10V	
C6072	ECQV1H224JL	0.22 / J / 50V	
DIODE			
D6003	GL9ED2	LED	

Ref. No.	Part No.	Part Name & Description	Remarks
TRANSISTORS			
Q6000	PJVTDTTC143X	Transistor	
Q6001	PJVTDTTC143X	Transistor	
Q6032	PJVTDTTC143X	Transistor	
Q6033	PJVTDTTC143X	Transistor	
Q6034	PJVTDTTC143X	Transistor	
ICs			
IC6001	SN74HC245N	IC	
IC6002	SN74HC245N	IC	
OTHERS			
SW6000	EVQ23405R	Side Switch	
SW6001	EVQ23405R	Side Switch	
SW6002	EVQ23405R	Side Switch	
SW6003	EVQ23405R	Side Switch	
SW6004	EVQ23405R	Side Switch	
SW6005	EVQ23405R	Side Switch	
SW6006	EVQ23405R	Side Switch	
SW6007	EVQ23405R	Side Switch	
SW6008	EVQ23405R	Side Switch	
SW6009	EVQ23405R	Side Switch	
SW6010	EVQ23405R	Side Switch	
SW6011	EVQ23405R	Side Switch	
SW6012	EVQ23405R	Side Switch	
CN6000	K1KA24BA0044	Connector	
CN6027	K1KA14AA0217	Connector	
CN6028	K1KA14AA0217	Connector	
BZ6000	L0DCEA000026	Buzzer	
	LH-36-5	Spacer	

15.7. SIZE Board

Ref. No.	Part No.	Part Name & Description	Remarks
RESISTORS			
R6024	ERDS2TJ331	330 / J / (1/4W)	
R6025	ERDS2TJ331	330 / J / (1/4W)	
R6026	ERDS2TJ331	330 / J / (1/4W)	
R6027	ERDS2TJ331	330 / J / (1/4W)	
R6028	ERDS2TJ331	330 / J / (1/4W)	
R6029	ERDS2TJ103	10K / J / (1/4W)	
R6030	ERDS2TJ103	10K / J / (1/4W)	
R6031	ERDS2TJ103	10K / J / (1/4W)	
R6032	ERDS2TJ103	10K / J / (1/4W)	
R6033	ERDS2TJ103	10K / J / (1/4W)	
R6034	ERDS2TJ103	10K / J / (1/4W)	
CAPACITORS			
C6005	F1E1H1040017	0.1 / Z / 50V	
C6006	F1E1H1040017	0.1 / Z / 50V	
C6007	F1E1H1040017	0.1 / Z / 50V	
C6008	F1E1H1040017	0.1 / Z / 50V	
C6036	F1E1H1040017	0.1 / Z / 50V	
TRANSISTORS			
Q6002	2SC3311A	Transistor	
Q6003	2SC3311A	Transistor	
Q6004	2SC3311A	Transistor	
Q6005	2SC3311A	Transistor	
Q6006	2SC3311A	Transistor	
ICs			
IC6003	B3NAA0000097	Photo Interrupter	
IC6004	B3NAA0000097	Photo Interrupter	
IC6005	B3NAA0000097	Photo Interrupter	
IC6006	B3NAA0000097	Photo Interrupter	
IC6007	B3NAA0000097	Photo Interrupter	
OTHERS			
CN6001	K1MN10BA0072	Connector	
CN6013	K1KA04B00220	Connector	

15.8. HOPPER [CONNECTOR] Board

Ref. No.	Part No.	Part Name & Description
OTHERS		
CN6003	K1MN10AA0019	Connector

Ref. No.	Part No.	Part Name & Description
CN6005	K1KA09A00215	Connector

15.9. HOPPER [POSITION] Board

Ref. No.	Part No.	Part Name & Description	Remarks
RESISTORS			
R6035	ERDS2TJ331	330 / J / (1/4W)	
R6036	ERDS2TJ103	10K / J / (1/4W)	
R6039	ERDS2TJ331	330 / J / (1/4W)	
R6040	ERDS2TJ103	10K / J / (1/4W)	
CAPACITORS			
C6009	F1E1H1040017	0.1 / Z / 50V	
C6011	F1E1H1040017	0.1 / Z / 50V	
TRANSISTORS			
Q6007	2SC3311A	Transistor	
Q6009	2SC3311A	Transistor	
ICs			
IC6008	B3NAA0000097	Photo Interrupter	
IC6010	B3NAA0000097	Photo Interrupter	
OTHERS			
CN6004	K1MN04AA0019	Connector	
CN6014	K1KA05A00350	Connector	

15.10. HOPPER [ANGLE] Board

Ref. No.	Part No.	Part Name & Description	Remarks
RESISTORS			
R6037	ERDS2TJ331	330 / J / (1/4W)	
R6038	ERDS2TJ103	10K / J / (1/4W)	
CAPACITOR			
C6010	F1E1H1040017	0.1 / Z / 50V	
TRANSISTOR			
Q6008	2SC3311A	Transistor	
IC			
IC6009	B3NAA0000097	Photo Interrupter	
OTHER			
CN6002	K1MN04AA0019	Connector	

15.11. POINTER Board

Ref. No.	Part No.	Part Name & Description	Remarks
RESISTORS			
R6044	ERDS2TJ331	330 / J / (1/4W)	
R6045	ERDS2TJ103	10K / J / (1/4W)	
CAPACITOR			
C6013	F1E1H1040017	0.1 / Z / 50V	
TRANSISTOR			
Q6011	2SC3311A	Transistor	
IC			
IC6012	B3NAA0000097	Photo Interrupter	
OTHERS			
CN6015	K1KA03B00194	Connector	
CN6016	K1KA04B00220	Connector	

15.12. RELAY [LOWER] Board

Ref. No.	Part No.	Part Name & Description	Remarks
RESISTORS			
R6047	ERDS2TJ473	47K / J / (1/4W)	
R6048	ERDS2TJ473	47K / J / (1/4W)	
R6049	ERDS2TJ473	47K / J / (1/4W)	
R6050	ERDS2TJ473	47K / J / (1/4W)	
R6051	ERDS2TJ821	820 / J / (1/4W)	
R6052	ERDS2TJ821	820 / J / (1/4W)	
R6053	ERDS2TJ222	2.2K / J / (1/4W)	
R6054	ERDS2TJ472	4.7K / J / (1/4W)	
R6055	ERDS2TJ222	2.2K / J / (1/4W)	
R6056	ERDS2TJ472	4.7K / J / (1/4W)	
R6057	ERDS2TJ472	4.7K / J / (1/4W)	

Ref. No.	Part No.	Part Name & Description	Remarks
R6058	ERDS2TJ102	1K / J / (1/4W)	
R6059	ERDS2TJ682	6.8K / J / (1/4W)	
R6060	ERDS2TJ102	1K / J / (1/4W)	
R6062	ERDS2TJ102	1K / J / (1/4W)	
R6064	ERDS2TJ103	10K / J / (1/4W)	
CAPACITORS			
C6014	F1E1H1040017	0.1 / Z / 50V	
C6015	F1E1H1040017	0.1 / Z / 50V	
C6016	F1E1H1040017	0.1 / Z / 50V	
C6041	F1E1H1040017	0.1 / Z / 50V	
C6042	F1E1H1040017	0.1 / Z / 50V	
C6044	F1E1H103A097	0.01 / Z / 50V	
C6045	F1E1H103A097	0.01 / Z / 50V	
C6047	ECEA1VKS100	10 / M / 35V	
C6048	ECEA1CKS101	100 / M / 16V	
TRANSISTORS			
Q6012	2SC3311A	Transistor	
Q6013	2SA1309A	Transistor	
Q6014	2SC3311A	Transistor	
Q6015	2SA1309A	Transistor	
Q6016	2SC3311A	Transistor	
Q6017	2SC3311A	Transistor	
Q6018	2SC3311A	Transistor	
Q6019	2SA1309A	Transistor	
Q6020	2SC3311A	Transistor	
IC			
IC6013	C0JAAB000109	IC	
OTHERS			
CN6007	K1KA04AA0049	Connector	
CN6018	K1KA06A00429	Connector	

15.13. POST IMPRINTER DOOR Board

Ref. No.	Part No.	Part Name & Description	Remarks
RESISTORS			
R6041	ERDS2TJ331	330 / J / (1/4W)	
R6042	ERDS2TJ103	10K / J / (1/4W)	
R6043	ERDS2TJ103	10K / J / (1/4W)	
R6074	ERDS2TJ103	10K / J / (1/4W)	
R6075	ERDS2TJ103	10K / J / (1/4W)	
CAPACITOR			
C6012	F1E1H1040017	0.1 / Z / 50V	
TRANSISTOR			
Q6010	2SC3311A	Transistor	
IC			
IC6011	B3NAA0000097	Photo Interrupter	
OTHER			
CN6006	K1KA04BA0030	Connector	

15.14. EXIT [FRONT] Board

Ref. No.	Part No.	Part Name & Description	Remarks
RESISTORS			
R6061	ERDS2TJ221	220 / J / (1/4W)	
R6063	ERDS2TJ333	33K / J / (1/4W)	
CAPACITOR			
C6049	F1E1H1040017	0.1 / Z / 50V	
TRANSISTOR			
Q6021	2SA1309A	Transistor	
IC			
IC6014	B3NAB0000028	Photo Reflector	
OTHER			
CN6017	K1KA03B00194	Connector	

15.15. SKEW [L] Board

Ref. No.	Part No.	Part Name & Description	Remarks
RESISTORS			

Ref. No.	Part No.	Part Name & Description	Remarks
R6065	ERDS2TJ271	270 / J / (1/4W)	
R6066	ERDS2TJ271	270 / J / (1/4W)	
R6067	ERDS2TJ271	270 / J / (1/4W)	
R6068	ERDS2TJ271	270 / J / (1/4W)	
R6069	ERDS2TJ333	33K / J / (1/4W)	
R6070	ERDS2TJ333	33K / J / (1/4W)	
R6071	ERDS2TJ333	33K / J / (1/4W)	
R6072	ERDS2TJ333	33K / J / (1/4W)	
CAPACITOR			
C6017	F1E1H1040017	0.1 / Z / 50V	
TRANSISTORS			
Q6022	2SA1309A	Transistor	
Q6023	2SA1309A	Transistor	
Q6024	2SA1309A	Transistor	
Q6025	2SA1309A	Transistor	
ICs			
IC6015	B3NAB0000028	Photo Reflector	
IC6016	B3NAB0000028	Photo Reflector	
IC6017	B3NAB0000028	Photo Reflector	
IC6018	B3NAB0000028	Photo Reflector	
OTHERS			
CN6020	K1KA08B00238	Connector	
	PBHR38X	Spacer	

15.16. SKEW [R] Board

Ref. No.	Part No.	Part Name & Description	Remarks
RESISTORS			
R6076	ERDS2TJ271	270 / J / (1/4W)	
R6078	ERDS2TJ271	270 / J / (1/4W)	
R6077	ERDS2TJ333	33K / J / (1/4W)	
R6079	ERDS2TJ333	33K / J / (1/4W)	
CAPACITOR			
C6019	F1E1H1040017	0.1 / Z / 50V	
TRANSISTORS			
Q6027	2SA1309A	Transistor	
Q6028	2SA1309A	Transistor	
ICs			
IC6020	B3NAB0000028	Photo Reflector	
IC6021	B3NAB0000028	Photo Reflector	
OTHERS			
CN6023	K1KA06BA0008	Connector	
	PBHR38X	Spacer	

15.17. JAM Board

Ref. No.	Part No.	Part Name & Description	Remarks
RESISTORS			
R6080	ERDS2TJ221	220 / J / (1/4W)	
R6081	ERDS2TJ333	33K / J / (1/4W)	
CAPACITOR			
C6020	F1E1H1040017	0.1 / Z / 50V	
TRANSISTOR			
Q6029	2SA1309A	Transistor	
IC			
IC6022	B3NAB0000028	Photo Reflector	
OTHER			
CN6024	K1KA03B00194	Connector	

15.18. RETARD [POSITION] Board

Ref. No.	Part No.	Part Name & Description	Remarks
RESISTOR			
R6073	ERDS2TJ331	330 / J / (1/4W)	
CAPACITOR			
C6018	F1E1H1040017	0.1 / Z / 50V	
TRANSISTOR			
Q6026	2SC3311A	Transistor	
IC			

Ref. No.	Part No.	Part Name & Description	Remarks
IC6019	B3NAA0000097	Photo Interrupter	
OTHER			
CN6022	K1KA03B00194	Connector	

15.19. FAN RELAY 1 Board

Ref. No.	Part No.	Part Name & Description	Remarks
CN6008	K1KA03AA0054	Connector	
CN6019	K1KA03A00465	Connector	

15.20. FAN RELAY 2 Board

Ref. No.	Part No.	Part Name & Description	Remarks
OTHERS			
CN6009	K1KA03AA0054	Connector	
CN6021	K1KA03A00465	Connector	

15.21. RELAY [UPPER] Board

Ref. No.	Part No.	Part Name & Description	Remarks
RESISTORS			
R6083	ERDS2TJ101	100 / J / (1/4W)	
R6084	ERDS2TJ473	47K / J / (1/4W)	
R6086	ERDS2TJ101	100 / J / (1/4W)	
R6088	ERDS2TJ473	47K / J / (1/4W)	
R6089	ERDS2T0	0-ohm Jumper	
R6090	ERDS2TJ123	12K / J / (1/4W)	
R6091	ERDS2TJ473	47K / J / (1/4W)	
R6092	ERDS2TJ104	100K / J / (1/4W)	
R6093	ERDS2TJ472	4.7K / J / (1/4W)	
R6094	ERDS2TJ472	4.7K / J / (1/4W)	
R6095	ERDS2TJ473	47K / J / (1/4W)	
R6096	ERDS2TJ102	1K / J / (1/4W)	
R6097	ERDS2TJ153	15K / J / (1/4W)	
R6098	ERDS2TJ102	1K / J / (1/4W)	
R6099	ERDS2TJ102	1K / J / (1/4W)	
R6100	ERDS2TJ392	3.9K / J / (1/4W)	
R6101	ERDS2TJ751T	750 / J / (1/4W)	
R6102	ERDS2TJ152	1.5K / J / (1/4W)	
CAPACITORS			
C6022	F1E1H1040017	0.1 / Z / 50V	
C6023	F1E1H103A097	0.01 / Z / 50V	
C6024	F1E1H1040017	0.1 / Z / 50V	
C6025	F1E1H1040017	0.1 / Z / 50V	
C6026	F1E1H1040017	0.1 / Z / 50V	
C6027	F1E1H1040017	0.1 / Z / 50V	
C6062	ECQB1H103JF3	0.01 / J / 50V	
C6063	ECQB1H103JF3	0.01 / J / 50V	
C6064	ECQB1H103JF3	0.01 / J / 50V	
C6065	ECEA1CKS101	100 / M / 16V	
C6066	ECQB1H103JF3	0.01 / J / 50V	
C6067	ECEA1CKS101	100 / M / 16V	
C6068	ECQB1H103JF3	0.01 / J / 50V	
C6069	ECQV1H474JL3	4.7 / J / 50V	
C6071	ECQB1H103JF3	0.01 / J / 50V	
DIODE			
D6002	MA165	Diode	
TRANSISTORS			
Q6030	2SA1309A	Transistor	
Q6031	2SC3311A	Transistor	
ICs			
IC6023	C0AAAB000097	IC Operational Amp.	
IC6024	NJM2082D	IC Operational Amp.	
OTHERS			
CN6010	K1KA14AA0020	Connector	
CN6011	K1KA03AA0049	Connector	
CN6012	K1KA20AA0070	Connector	
CN6025	K1KA04A00498	Connector	
CN6026	K1KA03A00465	Connector	